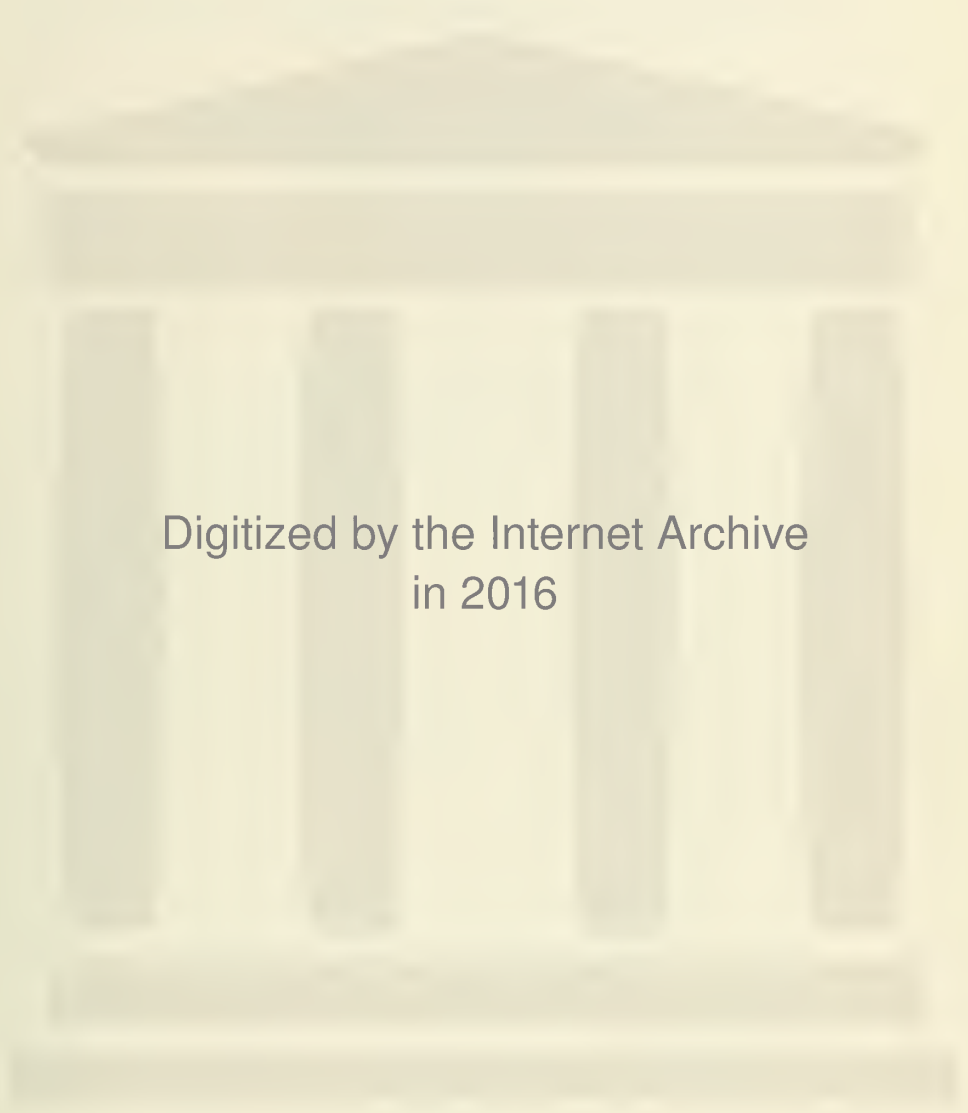




HEALTH SCIENCES LIBRARY
UNIVERSITY OF MARYLAND
BALTIMORE



Digitized by the Internet Archive
in 2016

<https://archive.org/details/journalofmichiga3511mich>

The Journal of the Michigan State Medical Society

Published Under the Direction
of the Council

PUBLICATION COMMITTEE

A. S. Brunk, M. D. (Chairman)
Howard H. Cummings, M. D.
Roy H. Holmes, M. D.
Vernon Moore, M. D.

J. H. Dempster, M. D.
Editor

L. Fernald Foster, M. D., Secretary
Wm. J. Burns, Business Manager

VOLUME 35
1936



5790

THE JOURNAL

OF THE

Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. 35

JANUARY, 1936

No. 1

COMMENTS ON THE MEDICAL MANAGEMENT OF DISEASE OF THE GALL BLADDER*

J. H. MUSSER, M.D.
NEW ORLEANS, LOUISIANA

In presenting my subject today I am proposing, first, to consider the gallbladder rather broadly and then to bring out certain features of disease of this organ so that my thesis, the management of gallbladder disease, from the point of view of the internist, will be preambled by a brief résumé of what gallbladder disease is, how it expresses itself and what is the concept concerning the most frequent complication and causal factor in the production of the disease, namely gall stone. I am going to discuss also some of the surgical aspects of gallbladder disease, I hope without infringing upon my surgical colleagues' domain.

History

Preparatory to discussing gallbladder disease a brief survey of some historical aspects may not be amiss. Much of this paragraph has been made possible by an excellent short historical review of cholecystic disease.¹⁷

Some years ago a stone was found in an Egyptian mummy, dating circa 1500 B. C. Although the proof of the existence of gall stones in the ancients was thus established, nevertheless they were not recognized until the latter part of the Middle Ages. Because of the clear-cut, easily diagnosed syndrome of gall stone colic it is obvious that the disease was rare in the people of that time, probably due to the fact that they led an active outdoor life. Automobiles were not existent in those days to take the young stripling or the aged individual a hundred yards or a hundred miles. Our ancient predecessors also ate plain foods and they led a simple life.

In the 16th century codification of the Talmudic Law, there is a brief, concise description of gall stones as they occur in animals. Gentile de Foligno, 1348, was the first to see gall stones in man but there is no written record of this observation, so possibly it may be merely legendary. However, A. Benibenius was the first to write about gall stones some hundred years later. Shortly afterwards Fernelius, 1554, recorded the clinical symptoms that were the expressions of these stones that Benibenius had seen. He described not only the syndrome of colic but also made a keen clinical note that stones in the common duct occasioned white bowel movement and darkly discolored the urine. Evidently this was a live subject at that time, as, in 1563, the great Paracelsus advanced the theory that stones were made as result of chemical changes in the body which did not affect the vital processes, another excellent observation which shows that the older clinicians had certain workable theories which are not in many respects different from those of

*From the Department of Medicine, School of Medicine, Tulane University of Louisiana, and the Charity Hospital of Louisiana, New Orleans. Presented before the 70th annual meeting of the Michigan State Medical Society, Sault Ste. Marie, September 25, 1935.

the present day. Wepfer, 1658, noted that bile was formed in the liver, while Ettmüller, 1708, made the clever observations that the disease occurred frequently in women who had had children, that jaundice need not necessarily be present when gall stones were causing the symptoms, and that the gallbladder was not necessary to life. This was proved by him through animal experimentation in 1667. The great English clinician, Sydenham, appreciated and recognized that biliary colic existed as a definite syndrome, but, strange to say, in spite of the obvious signs and symptoms of the condition, he maintained that these were hysterical. Jean Louis Petit, in 1743, first operated upon a patient for the removal of a gall stone.

The modern period may be said to have begun in 1867 when J. S. Boggs of Indiana, thinking he was removing an ovarian cyst, discovered that it was a hydrops of the gallbladder. He performed the first cholecystotomy. The outstanding surgeons of the time such as Simms, Keen and other Americans, were soon repeating this operation and it became popular relatively rapidly. C. Langenbuch, in 1882, was the first surgeon to perform a cholecystectomy. By 1890 Courvoisier collected 97 reports of this operation. Langenbuch did not operate until he had deliberately and carefully studied the whole question. He reasoned that inasmuch as certain species of animals live without a gallbladder further existence was compatible with health in the patient who had the gallbladder removed. He also proceeded to perfect himself in the technical aspects of the operation by repeated cadaveric observation.

In more recent years marked advances have been made in the study of gallbladder disease. B. B. V. Lyon (1923) instituted the study of bile aspirated by duodenal tube as well as inaugurating treatment by transduodenal gallbladder drainage. In 1898 Bauxbaum first demonstrated gall stones by x-ray. Almost twelve years ago Graham and Cole⁷ prepared a combination of phenolphthalein, tetraiodophenolphthalein and phenoltetraiodophthalein, visualized the gallbladder and showed that visualization of the gallbladder was the most excellent functional test of its efficiency. Shurmayer (1910) was apparently the first to bring out indirect roentgenologic signs of gallbladder disease. In recent years in the field of physiology Rous, McMaster, Ivy, Mann, Whip-

ple and Meltzer have presented distinguished researches on the functions of the gallbladder.

Physiology

The gallbladder is a relatively small receptacle holding, under ordinary circumstances, about 45 c.c. of bile. The liver secretes about 1,000 c.c. in the course of twenty-four hours, so it can be appreciated that, while small, the organ is most active. The inner surface, covered as it is with a rather interesting mucous membrane, is capable of concentrating the bile about ten times. Briefly, the gallbladder can contract, absorb or secrete.

Contraction.—Contraction of the organ is of two types. In the first there occurs merely a more or less rhythmic change in tonus equivalent to 1-3 cm. of bile pressure. The second type is a tonic contraction of the whole organ, with a corresponding tenfold increase of bile pressure in response to stimulation by a duodenal hormone, cholestikinin. Nerve stimulation has a moderate transitory contracting effect. It is of some moment that the gallbladder, supplied partly from the vagus and partly from the ninth dorsal segment of the cord (sympathetic), has a nerve supply corresponding to that of the stomach, explaining in part the occurrence of the reflex gastric symptoms that are such common complements of gallbladder disease. Hormone production in turn is dependent in a large part upon the type of food which passes from the pylorus into the duodenum. Fats are the prime stimulators of cholestikinin, notably cream and egg yolk; proteins are moderately effective, while carbohydrates are inert. It has been proved that drugs have some slight action on gallbladder musculature but this is immeasurably less than the action produced by the active hormone. Pituitary and pilocarpin increase tonus; atropine relaxes the musculature; magnesium sulphate or sodium sulphate will occasion a brisk expulsion of bile into the intestines. This effect is attributed to the result of relaxation of the sphincter of Oddi. Meltzer's concept of a reciprocal action between the gallbladder and the sphincter is probably true. Contraction of the organ is concurrent with sphincter relaxation so that when the latter contracts the former fills. Following cholecystectomy there is primarily a loss of sphincter action which ultimately returns to such a high de-

gree that the bile ducts are wont to undergo dilatation. Ivy,^{8, 9} whose splendid review on gallbladder function could be read with great benefit by those interested, believes that the cholechoduodenal mechanism indicates that the gallbladder and sphincter constitute a functional unit. In the great majority of instances, in response to a fat meal, contraction and emptying of the gallbladder with the simultaneous relaxation of the sphincter is relatively prompt, the gallbladder being completely empty in about two hours. However, it appears likely in one or two of every ten patients with gallbladder symptoms that there is motor dysfunction without organic disease, resulting in spasm of the sphincter with the gallbladder contracting, which in turn causes colicky pain, or there may be relaxation of the organ with a dull persistent hypochondrial discomfort. Fat intolerance may be dependent upon faulty functioning of this mechanism.

Absorption.—This function has to do with the well known ability of the gallbladder, mentioned above, to concentrate hepatic bile five to ten times. Although normally seemingly holding a small amount of bile the organ actually can take care of a larger amount of hepatic bile, as much as is secreted in twelve to twenty-four hours, under conditions such as sudden obstruction. A diffusely inflamed gallbladder is unable to concentrate or to evacuate, hence the need of resting the gallbladder when acutely inflamed. If diffuse fibrosis takes place likewise the gallbladder ceases to function and a bland, non-stimulating diet is indicated. In that relatively rare and interesting condition of cholesterosis, the so-called strawberry gallbladder, opinion is divided as to whether this condition depends upon improper absorption or upon secretion of cholesterol, though present day evidence is rather definitely against the assumption that cholesterol may be secreted by the gallbladder.

Function of Secretion.—The mucosa of the gallbladder secretes as do all mucous linings. The fluid is a watery mucus, in amount probably about 20 c.c. per diem. In the presence of inflammation hypersecretion takes place. So-called white bile may be found in the gallbladder when there is a severe toxic or infectious hepatitis or when, in the presence of a useless gallbladder, the common duct is obstructed.

Pathologic Physiology

This has been discussed in part in the paragraph devoted to normal physiology. One phase of disturbed pathology of the organ should be mentioned here and that is the production of stone. There are three types of stone likely to be found in the gallbladder. The pure cholesterol stone, often mentioned as the metabolic stone, is probably essentially dependent upon disturbance of cholesterol metabolism. This is usually a single large stone. The pure pigment stone also may be formed as result of metabolic disturbances which have to do primarily with pigment metabolism. These stones are many and small. Both of these two types of stone are relatively rare. On the other hand the usual variety spoken of as infective or mixed stone is a stone that is composed of cholesterol, calcium and bilirubin. These stones vary materially in number. It is this stone in which we are primarily interested. Such stones are attributed to one or more of five important etiologic factors. They are: (1) infection, (2) stasis, (3) obesity, (4) hypercholesteremia, and (5) pregnancy. It is undoubtedly true that these factors are the motivating force for the development of gall stones but it is decidedly a moot question as to which is primarily the incriminating factor. Stasis was once considered the most important cause of the formation of gall stones. The obese person or the pregnant woman presumably had a slowing down of bile elimination. Stasis is important because it favors the infection of bile and inflammation of the gallbladder. The weight of evidence is, in my opinion, in favor of infection in playing the most important rôle in the formation of gall stones. There is a tendency among certain students of the problem to minimize infection and to lay the greatest stress on metabolic and chemical changes in the body, and stasis. Injury by bacteria or other toxic agents is the prelude to the formation of stones. Subsequently cholesterol is precipitated from the bile as a result of lowering of the bile salt content of the bile.¹ The infected gallbladder absorbs bile salts quickly, cholesterol slowly. A change in the bile salt cholesterol ratio is undoubtedly an important factor in the etiology of gall stones. This mechanistic disturbance is dependent upon disease of the gallbladder. In the production of stone bacteria play a most important part and in cholecystic disease bac-

teria likewise are, of course, of primary significance. Judd¹¹ states that bacteria are found in 30 per cent of stones, are present in the gallbladder bile in 15 per cent of cases and 49 per cent of instances in the wall of the gallbladder. The most important observation of all in showing how bacteria enter the gallbladder, by way of the lymphatics (or blood stream), is the fact that 80 per cent of cultured lymph nodes around the cystic duct, which, of course, are not touched by bile, show the presence of bacteria.

Pathology

I am going to consider chronic infection of the gallbladder and stone more or less together. They are so thoroughly admixed clinically, pathologically, and etiologically that this seems to be the logical procedure. I will briefly mention only acute gallbladder infection, and the other pathologic conditions of the gallbladder such as empyema, hydrops, torsion, traumatic lesions, cancer and so on will not be mentioned.

Symptoms

The importance of a thorough historical survey needs hardly to be emphasized in the assaying of the symptoms of gallbladder disease. As an example, in acute cholecystitis more than one-half of the patients will give the story of previous attacks in the past. A chronological account of the detailed symptoms should be obtained in every case. By far the most important point, both in diagnosis and treatment, is the story, clear-cut and unequivocal, of an attack of gallbladder colic or jaundice. Lacking such an account, suspicious evidence must be given more than perfunctory importance; analyze carefully the story of pain occurring from time to time in the region of the gallbladder or attacks of jaundice. The symptoms of functional dyspepsia are so well known that they need hardly to be dwelt upon in detail and likewise the occurrence of pain is fundamental. I thought it might be of some interest to analyze eighty-five cases of chronic cholecystitis, and cholelithiasis, that have been observed on our Tulane Service in the Charity Hospital during the last few years. It might not only be interesting but also tend to substantiate the well known clinical features of these disorders. In this series, which is too small to be of importance, the oldest person was

seventy-one years and the youngest, twenty-three. Fifty-two of these cases were males, the remainder females. This predominance of males, however, must be discounted by the fact that we see three times as many male patients as female.

In most instances the chief complaint had to do with the associated gastric dysfunction. Such important complaints as "gas on the stomach," nausea, vomiting and so on were common, but pain, which was one of the chief complaints, was present in sixty-nine instances. In the detailed study of the symptoms it was found that nausea and vomiting were present in more than half of the histories. The broad term indigestion was noted in twenty-one cases. It is rather remarkable that belching of gas was not nearly as frequent as is generally stressed. Sour eructations were noted by twelve of the patients; slightly under 50 per cent of them were constipated. The character of pain was extremely variable. It was in the left hypochondrium in some instances, in others in the epigastrium, in others under the sternum (two cases) and in several it was in the back. Pain was variously described as cramp-like, gnawing, dull ache,¹⁶ burning, shooting, colicky and crushing in character. The symptoms varied in duration from under six months in twenty-seven instances all the way up to twenty years. Eighteen of the patients had had their complaints for from one to two years, rather disillusioning from the point of view that cholecystitis and cholelithiasis are essentially conditions of long duration and prolonged symptomatology. In seven instances tarry stools were observed; possibly the diagnosis in these cases was wrong. In fourteen instances jaundice was noted or had been present just prior to admission to the hospital. Eleven of the patients had had typhoid fever and twenty-four of the thirty-three women had previous pregnancies. Six of the total had appendectomies and two had a previous cholecystotomy.

In the physical examination fifty-seven of the patients were obese or classified as well nourished, twenty-two were thin, and in the remainder it was noted that the nutrition was fair only. As the pain varied, so likewise did tenderness shift over the greater part of the belly wall; in eighteen cases it was in the epigastrium; in sixteen instances it was in the region of the gallbladder and also it was noticed below the umbilicus, in

the left hypochondrium, left lower quadrant of the abdomen and pretty nearly every other available area was tender in one or more patients. When it came to rigidity of the muscles, however, here in the great majority of instances it was noted only in the right upper quadrant. In a very few instances was a mass palpated and in only sixteen patients was the liver found to be enlarged. I want to make one more remark about this group of patients, namely that of thirty-two patients, the gallbladder was visualized in seven instances and in twenty-five instances there was roentgenologic evidence of gallbladder disease as shown by failure to visualization of the gallbladder or the presence of indistinct shadows or the indirect evidence of gallbladder pathology.

Diagnosis

The aphorism attributed to Deaver that the gallbladder patient is fair, fat and forty, belches gas and has had children is a short cut to the diagnosis of gallbladder disease, but gallbladder disease diagnosis is not obtained by any such perfunctory examination of the type of patient or analysis of the patient. The diagnosis must be gotten by a detailed study of the symptoms, of the physical examination and of the laboratory examinations. These latter are of extreme importance. They include the information obtained (a) by the duodenal tube, (b) through blood examination, (c) x-ray, (d) stool, and (e) urine examination. Only the first three will be discussed.

The Duodenal Tube.—In the preliminary survey of the patient a test meal is of extreme value, especially in subsequent treatment of patients if operation is not done. In part drugs are administered according to the degree of gastric acidity. After the gastric contents are extracted the duodenal tube may be allowed to pass into the duodenum through the method of biliary drainage made popular by Lyon. Strong substantiative evidence is obtained by microscopic study of the bile obtained in this way. The finding of pus cells and bacteria, of cholesterol crystals or bilirubin, calcium pigment crystals or even tumor cells gives strong positive evidence that the gallbladder is diseased. In fact this evidence, although obtained relatively rarely, is often sufficient to make the diagnosis.

Blood Examinations.—The icterus index is a simple and easy method of estimating the presence or absence of jaundice and its degree. Blood cholesterol examination is usually routinely carried out. A hypercholesteremia is a positive finding, but not necessarily a negative finding of moment. When the blood is withdrawn a portion is sent to the laboratory for Wassermann reaction in order to rule out syphilis of the liver or gastric crisis of tabes. A blood count is made to exclude lead poisoning and microscopic examination of the blood is made in order to be of assistance in differentiating Charcot's intermittent fever from malaria.

X-ray.—By far the most common and dependable aid to diagnosis is the cholecystogram after the ingestion of a dye introduced by Graham and Cole⁵ some eleven years ago. The cholecystogram permits an estimation of the functional capacity of the gallbladder as well as the determination of its anatomic condition. The size, shape and position of the gallbladder are determined not only at one time but also alterations in the shadow are noted at different times in the cycle of digestion. The oral method of administering the dye is the one of choice. We have had several patients who nearly died from the administration of the dye intravenously. Gallbladder visualization is not by any means a pathognomonic procedure. In general terms it may be said if there is non-visualization of the gallbladder plus a positive history of gallbladder disease, pathology is likely to be present in the organ, whereas if it visualizes and there is also a positive history, pathology may or may not be present. It is interesting to note that only 62 per cent of the patients without gallbladder shadows were relieved by operation.⁶ This is by no means an indictment of cholecystography but rather, according to Graham, "failure to assess properly the different complaints of the patient." This statement accentuates the importance of complete examination.

Differential Diagnosis

It will be impossible to discuss differential diagnosis in detail. It should be noted that it is of importance to differentiate certain acute conditions of the gallbladder or outside of the gallbladder because of their importance in the subsequent history concerning possible acute attacks of bile tract involvement. Conditions which by careful

study may be differentiated from gallbladder disease include such disorders as ulcer of the stomach and duodenum, coronary occlusion, angina pectoris, abdominal angina, epigastric hernia, lead colic, gastric crisis of tabes and syphilitic hepatitis, diaphragmatic pleurisy, herpes zoster and intercostal neuralgia. These conditions can be differentiated in the majority of instances by careful study of the patient without very much trouble and difficulty. It is often a question of failure to remember that such conditions as epigastric hernia may cause pain resembling gallbladder disease or that lead colic or herpes before the eruption appears may likewise simulate gallbladder disease. I should like to stress for one minute the importance of intercostal neuralgia popularized by the late Dr. J. B. Carnett, more specifically in relation to the so-called chronic appendix but of equal importance also in the diagnosis of chronic cholecystitis. The pinch test, or some of the other methods of examination such as tenderness when the abdominal muscles are held taut, may give a lead which will obviate the necessity of prolonged treatment or of operation.

Treatment

In presenting the medical treatment of the patient with gallbladder disease I am going to make some rather random remarks on the surgical treatment of this condition. I want it understood, a priori, that there are certain indications for treatment by surgery just as there are certain reasons why a patient should not have this type of treatment.

First, in reference to stone—if they are producing symptoms it is best to operate. The silent or innocent stone, proof of which exists in the fact that 8 to 10 per cent of patients at autopsy have stones which apparently have not been producing symptoms, is a problem. There are certain reasons why the patient with a silent stone, if all other factors are equal, should have an operation. Categorically they are: (1) stone leads to acute cholecystitis; 80 per cent of patients who have acute cholecystitis have stones;¹⁵ (2) carcinoma is more likely to take place if stones are present. The figures vary from 94.9 per cent of primary carcinoma having stone (Siebert) to 4 per cent of secondary carcinoma (Rolleston and McNee). These latter figures are so low that any other disease of midlife might have the same incidence of stone. Burrows³ reports inciden-

tally that laboratory studies show no relationship between cancer and gallstone disease. (3) It may prolong a chronic cholecystitis. More than half of the patients operated on for stone have this in a well marked form. (4) Removal of silent stone may prevent common duct stone; 60 to 70 per cent of patients with common duct stone have gall stones.¹² (5) The quiet stone may ulcerate into the neighboring viscera, especially the duodenum. (6) After cholecystectomy 84 per cent of patients who had stones removed are without subsequent symptoms.¹³

In spite of these factors mentioned above one is hesitant about recommending the removal of a stone which is producing no symptoms. If the stone is to be removed it is wiser to remove it as soon as possible. Waldeyer¹⁹ has shown that the longer the postponement the greater is the danger connected with the operation.

Contraindications to Operation.—There are certain well defined associated diseases, the presence of which an operation of choice becomes an operation to be let alone. These include such diseases as pulmonary tuberculosis, thyroid disease, emphysema, and diabetes. Obesity itself should be controlled before operation is considered. Of particular interest is the fact that heart disease per se is no contraindication to operation if properly performed. Willius and Fitzpatrick²⁰ found that 54 per cent of heart patients they could trace after operation were definitely improved, a focus of infection having been removed. The improvement that occurs in some heart patients so-called has been suggested by a jovial surgeon as being due to the fact that the patient never did have angina pectoris but that the symptoms which were relieved by operation were due entirely to gallbladder colic.

Indications for Operation.—Assuming then that a patient has developed chronic cholecystitis and has gall stones, what is to be done with him? First, consider the indications for operation in the three types of the disease represented by minimal, by acute and by persistent signs and symptoms.

Occult Cases.—In these hidden or larval cases the mild symptoms that the patient presents are often those of cholangitis rather than a cholecystitis. For example, Scott¹⁶ finds that 15 per cent of the group

of patients he studied still have their symptoms after the gallbladder is out. It must be borne in mind definitely that in these minimal cases surgery is not to be resorted to and that medical management is decidedly indicated for a period of time at least. There is definitely an increased hesitancy among surgeons to operate unless indications are positive, definite and unequivocal. The gallbladder is an active functioning organ. It is not a residual structure as the appendix. Its purposes in the human economy may be slight but they must be necessary. After the gallbladder is removed there is dilatation of hepatic and common ducts. Sometimes a stricture of the common duct may occur; at other times as result of inflammatory changes in the bile ducts sphincteric activity of the ampulla is lost. Lastly, cholecystectomy has a definite depressing effect on hepatic and renal function to add materially to the dangers of operation.⁴ Then there is also the possibility that the symptoms may be functional in origin as shown by Ivy and his workers.¹⁰ These factors plus the fact that there is always danger inherent in any abdominal operation forbids operation unless the surgeon has a malformed lust for surgery.

In acute cholecystitis the medical man will not contend that these cases should not be operated upon but should insist that operation be postponed for a period of time until the more acute symptoms subside and the patient has been prepared for operation with a high carbohydrate diet, with fluids to excess and with calcium.

Chronic Cholecystitis.—Surgery should be insisted upon, provided, of course, one of the few contraindications to operation be not present. If the history is positive or there is physical evidence of stone it is inadvisable to wait. These cases represent the more severe chronic type of case and should be operated upon. In the milder cases waiting for a period of time to see the result of medical treatment is certainly indicated. I am not in accord with Wakeley's¹⁸ definition of chronic cholecystitis which states that it is a "chronic progressive disease which begins with infection of the gallbladder in early life, quite often gives rise to chronic biliary colic in midlife and if not treated by surgical means will cause serious complications in later life." I do not believe that it is invariably a progressive dis-

ease, nor by any means do I think that if not treated by surgical means serious complications are bound to occur.

Medical Treatment

There exists then a considerable number of patients who: (a) have low grade cholecystitis, (b) have silent stones, and (c) have some other type of disease which makes operation inadvisable. It is from these groups the internist obtains his patients who are to be handled by medical measures. In the first instance therapy is directed towards deleting these factors which favor gall stone formation, in the next towards preventing additional injury from the gall stone, and in the last towards giving the patient symptomatic relief.

It is obvious that certain factors which predispose to gall stones cannot be obviated. I would like to restate that a woman of 30 with a low grade cholecystitis is not going to give up having children merely because gall stones might develop during her months of pregnancy, nor is there any way to prevent gallbladder infection once a patient develops typhoid fever or some other type of infection. On the other hand, it is possible to keep the patient from getting obese, to prevent biliary stasis and to control in a measure hypercholesteremia.

Infection.—Granted that as it is not known whether infection of the gallbladder is a result of primary blood stream infection infecting the bile or whether organisms are carried by the cystic artery or the lymphatics from the liver, or is due to the transportation of bacteria from the bile duct to the gallbladder, it is plain that treatment or prevention of infection will be inadequate. However, it is customary always to advise the removal of foci of infection wherever they may be. Whether or not this has any effect on the gallbladder itself is subject to argument, but at least there can be no question that removal of such foci does materially aid in improving the general good health of the patient. If Hurst's concept holds true that infection travels upward from the duodenum, and this concept is extremely doubtful, then the factor of gastritis may possibly be obviated by proper dietary and eating habits. Likewise it seems logical to assume that measures taken to prevent biliary stasis will diminish the likelihood to, and favor the clearing up of, infection. Re-

puted biliary antiseptics are worthless in attempting to prevent or to cure bile tract infection.

Biliary Stasis.—Exercise probably has comparatively little effect on stasis of the biliary tract. Nevertheless it must be conceded that it may have some slight stimulating power and undoubtedly it is a hygienic measure which puts vigor and vitality into the patient. Therefore, have the patient take regularly in the morning setting-up exercises. The most satisfactory are those that strengthen the abdominal muscles such as bending over and touching the floor with the fingertips, lying in bed and bringing the knees up and as far back as possible, and lying dorsally and then lifting up the trunk from the floor. The effect of these exercises would be augmented by making them resistant in character. Provide for a daily walk and once or twice a week an afternoon of exercise such as a long ramble in the country, golf or even a brisk ride on the back of a horse. It is often difficult, it is true, to get patients to follow out instructions at home in regard to exercise, regular habits of living and so on, yet they will go to European or American spas and pay large sums of money to follow treatment which can be done equally well in the privacy of the bedroom.

Certain saline cathartics such as sodium sulphate or phosphate and magnesium sulphate help to empty the gallbladder. The nicest of these saline laxatives is effervescent sodium phosphate taken in the morning before breakfast in dosage sufficient to bring about a thorough evacuation of the bowel and bile. Here again the same effect is obtained before the washstand in the bathroom as in walking to an ornate pavilion before breakfast and being served a cup or mug of a vile tasting "natural" combination of salts by a pretty little attendant in a blue dress, cap and apron. How well the French know the psychological reaction of the American to these dressings and disguises of a cup of salts in solution. Each year at Vichy is held a yearly conference on gallbladder disease where the beauties and attractions of the spa are pointed out as well as the efficacy of the waters from the springs.

Gallbladder drainages through a duodenal tube, after injecting magnesium sulphate, are and have been extensively practiced. Prob-

ably this method of drainage of the gallbladder is no more efficacious than emptying it with salines taken by mouth or by a fatty diet, but the psychological value is undoubted. To see the nasty looking dark bile dripping into a nice white porcelain pan convinces the patient that he or she is getting rid of a tremendous amount of poisonous substance, so they feel that they should feel very much better. If we grant that transduodenal drainage does have some value one way or the other then by all means train the patient to carry out this procedure himself. Sunday morning is always a good time to do this; they can pass the duodenal tube, lie on the right side for two or three hours watching the bile drip forth and not have to go to church.

Obesity.—If the patient is too fat, a gradual reduction in weight is a *sine qua non* for treatment. Through reduction in the amount of fats and carbohydrate intake, plus exercise, two or three pounds a week should be gotten rid of until the patient is not over five pounds above the average weight for age, height and sex. On the other hand on account of digestive complaints and intolerance to fats many patients have dieted themselves to such an extent that they are in a state of obvious subnutrition. With these patients it is necessary to build them up and to get them to put on weight by frequent small meals, never with large meals, and particularly with some light food on going to bed.

Hypercholesteremia.—Granting that disturbance of cholesterol metabolism is not the primary factor responsible for gall stones, yet in a patient with them the blood cholesterol is frequently found to be increased. The cholesterol content of blood varies through the course of a day but in the long run variations are but slight.² Furthermore, although it is possible to reduce gradually the blood cholesterol figures to normal it is not possible to get them down to subnormal levels. It is probable that the source of cholesterol is both endogenous and exogenous. Undoubtedly the greater part of it is derived from food. Certainly it is only through food intake that there may be any possibility of controlling the amount excreted by the bile. Hence it will be seen in conjunction with the paragraph on obesity to be logical here to consider the important subject of diet and gallbladder disease.

Diet.—It hardly seems necessary to emphasize the importance of individualizing in the treatment of a patient with gallbladder disease. The fat woman with a high blood cholesterol should have different foods than the thin man who has normal cholesterol figures or he who has an atonic, poorly emptying gallbladder. Certain general principles should be observed. Gastric complaints are extremely common largely as result of secondary reflex and nervous disturbances. These must be taken into consideration in planning the dietary. It should be bland and non-irritating, avoiding fried foods, high seasoning, mixed or twice cooked dishes, coffee, chocolate, fresh pastries and bread, and the heavy fibrous and seedy vegetables. Stewed fruits are preferable to raw and it is best to have them eaten at the end of the meal. Vegetables may well be put through a colander. All foods should be thoroughly masticated; the meal should never be large. If additional calories are required give them in supplementary meals. The patient should never sit down at the table after exercising; when they are about to partake of food their minds should be composed and peaceful. After meals have them lie down half an hour and think pleasant thoughts. Avoid much fluid with the meals. These general principles will apply to all cases. More specific instructions are needed in each instance. If a low cholesterol diet is indicated instructions are given to avoid egg yolk, butter, cream, liver, sweetbreads, duck, meat-fat and the fatty types of fish such as salmon and butter fish. The number of calories that the patient should consume should be adjudged by bodily nutrition; overweight less, underweight more calories than are normally required. With a poorly functioning gallbladder it is good advice to tell the patient to take fatty foods, high in cholesterol, but with these reservations: if it does not cause them distress and gall stones are not known to be present in a chronically diseased gallbladder. In spite of the recommendations about fats, in practice I find that two tablespoons of cream before or with a light breakfast seem to be of value symptomatically in many instances, but bear in mind that fats are distinctly contraindicated in the acute cholecystitis and when there is biliary obstruction.

It might be added appropriately that proper diet requires a certain amount of experimentation. Intelligent coöperation of

the patient is necessary. If this cannot be obtained operation is more likely to be considered on those who are economically, intelligently or digestively distressed. They cannot buy a selected diet; they do not have the intelligence to apply proper rules of living; the digestive disturbance, in certain individuals, may overshadow all else.

Drugs.—Saline cathartics have already been mentioned. A course of calomel every two weeks is to be suggested to the patient; possibly on scientific grounds there is no basis for its use, but liver and gallbladder disease connotes calomel in the minds of the laity so that whatever beneficial effects there are that are attributable to its use may have a psychical explanation. Many of these people have hyperacidity. Acids stimulate the gallbladder. This can be controlled by alkalis, given preferably $1\frac{1}{2}$ hours after meals. Antispasmodics, such as belladonna in full therapeutic doses, are beneficial in that they help to control the tendency to spasm of the pylorus, the colon or the biliary tract. Sedatives, such as bromides and barbituric acid preparations, also have a distinct place in helping the reflex gastric-intestinal symptoms which are aggravated by "nervousness." Once in a great while in the presence of a subacid or lack of acid, hydrochloric acid in teaspoonful doses taken with the meal, is beneficial.

Pre-operative Treatment.—Hepatitis is a common concomitant of the infected gallbladder. The liver is injured.¹⁴ Sometimes a hepatitis occurs as a primary disturbance and seems to be relieved and cured by cholecystectomy. In view of this associated hepatitis in so many instances it is particularly important to prepare the patient carefully for operation. I mentioned this in discussing acute gallbladder infection. Sometimes the internist can help the surgeon by giving to the patient, for a period of a few days before he goes to operation, carbohydrates in large amounts, keeping the fluid intake well up. In this way it is possible to prevent further hepatic damage and at operation to have the patient's liver at its maximal functioning power.

Conclusions

1. Infection of the biliary passages and cholelithiasis are extremely common conditions.
2. Disease of this tract is handled both

by the surgeon and by the internist and their intelligent coöperation is indicated in many cases.

3. Much can be accomplished in the medical management of patients with gallbladder disease who for certain reasons cannot be operated upon, or for whom the operation is not one of immediate necessity.

References

1. Andrews, E., Schoenheimer, R., and Hrdina, L.: Etiology of gall stones. *Arch. Surg.*, 25:796, 1932.
2. Bruger, M., and Somach, I.: Diurnal variation of cholesterol content of blood. *Jour. Biol. Chem.*, 97:23, 1932.
3. Burrows, H.: An experimental inquiry into association between gall stones and primary carcinoma of the gallbladder. *Brit. Jour. Surg.*, 20:607, 1933.
4. Editorial: Effect of cholecystectomy on hepatic and renal function. *Jour. A. M. A.*, 105:370, 1935.
5. Graham, E. A., and Cole, W. H.: The roentgenologic examination of the gallbladder. *Jour. A. M. A.*, 82:613, 1924.
6. Graham, E. A., and Mackey, W. A.: A consideration of the stoneless gallbladder. *Jour. A. M. A.*, 103:1497, 1934.
7. Graham, E. A., Cole, W. H., Copher, G. H., and Moore, S.: Diseases of the Gallbladder and Bile Duct. Lea & Febiger, 1928.
8. Ivy, A. C.: Physiology of the gallbladder. *Phys. Rev.*, 14:1, 1934.
9. Ivy, A. C.: The applied physiology of the gastro-hepatic biliary tract. *Jour. A. M. A.*, 103:1500, 1934.
10. Ivy, A. C., Voegtlin, W. L., and Greengard, H.: The physiology of the common bile duct; A singular observation. *Jour. A. M. A.*, 100:1319, 1933.
11. Judd, E. S.: Surgery of the biliary tract. *Trans. Med. Soc. of N. C.*, 1932.
12. Judd, E. S., and Marshall, J. M.: Gall stones in the common bile duct. *Arch. Surg.*, 23:175, 1931.
13. Judd, E. S., and Priestley, J. T.: Ultimate results from operations in the biliary tract. *Jour. A. M. A.*, 99:887, 1932.
14. Judd, E. S., Nickel, A. C., and Wellbrock, W. L. A.: The association of the liver in disease of the biliary tract. *Surg., Gyn. and Obst.*, 54:13, 1932.
15. Miller, R. H.: Acute cholecystitis. *Ann. Surg.*, 92:887, 1932.
16. Scott, A. C., Jr.: Modern management of gallbladder disease. *Texas State Jour. Med.*, 30:434, 1934.
17. Sherwood, K. K.: A historical sketch of cholelithiasis. *Northwest. Med.*, 30:335, 1931.
18. Wakeley, C. P. G.: Diseases of the gallbladder. *Brit. Med. Jour.*, 1:243, 1935.
19. Waldeyer, L.: Beitrag zur Chirurgie der Gallenwege auf Grund klinischer Erfahrungen an 571 operierten Patienten. *Deutsch. med. Wchnschr.*, 59:802, 1933.
20. Willius, F. A., and Fitzpatrick, J. M.: Relationship of infection of the gallbladder to disease of the cardiovascular system. *Jour. Iowa State Med. Soc.*, 15:589, 1923.

SOME SURGICAL ASPECTS OF DISEASE OF THE GALL BLADDER*

FREDERICK A. COLLER, M.D., and FLOYD BOYS, M.D.†
ANN ARBOR, MICHIGAN

Broadly speaking, there are no purely surgical aspects to disease of the biliary tract as it is now well recognized that its management can be best carried out by the closest coöperation between the internist, surgeon, and roentgenologist. Experience has shown that infection of the gall bladder, biliary calculi, and cholangitis, are best treated by surgical procedure, but the diagnosis of these conditions may require the combined efforts of a whole diagnostic team, and the treatment after operation is often best carried out by the internist.

The surgeon must concern himself with the selection of the lesion of the biliary tract suitable for operative treatment and with the choice of the technical procedure so as to keep the immediate mortality low and to provide a high percentage of cures as shown by a study of end-results.

We have just completed a survey of patients with disease of the biliary tract treated at the University Hospital for the five year period from January 1, 1930, to December 31, 1934, and the discussion in this paper will be limited to facts observed and lessons learned from this study. For convenience of discussion, the patients treated by operation have been separated into several groups

TABLE I

1. Acute cholecystitis	13
2. Chronic cholecystitis without stone.....	58
3. Chronic cholecystitis with stone.....	231
4. Cholelithiasis	26
5. Common duct stricture.....	6
6. Cholelithiasis and cholangitis without stone	3
7. Biliary fistula	4
8. Carcinoma of the gall bladder.....	5
Total.....	346

according to the problems they presented and are shown in Table I. Carcinoma of the bile ducts, pancreas and primary disease of the liver, have been excluded from the discussion. It must be emphasized, however, that any such separation of disease of the different parts of the biliary tract is not sound from the viewpoint of pathology, as all parts of the tract may be involved by disease originating in any single part, and the entire biliary system must be considered as one in every patient.

*From the Department of Surgery, University of Michigan. Read before the Michigan State Medical Society, Sault Ste. Marie, Michigan, September 24, 1935.

†Dr. Coller graduated from Harvard Medical School in 1912. He is Professor of Surgery and Director of the Department of Surgery, University of Michigan.

Dr. Boys graduated from Northwestern University. He is a Fellow in the Department of Surgery, University of Michigan.

Acute Cholecystitis

Our experience in this group is small and consequently perhaps not particularly instructive. During the past few years, several surgeons^{9, 11, 12} have advocated immediate operation, cholecystectomy by preference, for all patients with acute infection of the gall bladder. We have felt it wise to delay operation if it is clear that the acute process is not progressing. The patient is made comfortable with opiates and heat applied locally. Dehydration is corrected by the intravenous administration of isotonic glucose solution. Usually the pain soon diminishes and the signs of infection disappear more slowly when operation can be carried out easily and safely. Of this group, 11 patients passed through the acute phase of the infection and in an average of 12 days a cholecystectomy was performed. In one patient an immediate cholecystectomy was performed because of the gangrenous gall bladder, and in another patient, cholecystectomy was performed after watching the process for four days as the infection showed no signs of abating. Emergency surgery for acute infections of the gall bladder is rarely necessary. The general peritoneal cavity is seldom involved by infections originating in the gall bladder and this fact alone makes any argument for immediate operation, based on the analogy of acute appendicitis and acute cholecystitis, unsound. If at operation one finds the inflammatory process still active, as shown by the presence of edema and induration of the gall bladder and ducts, it is undoubtedly safer to drain the gall bladder with the intention of performing a cholecystectomy at a later date. An accurate dissection of the anatomical features of the blood vessels and ducts is often impossible under these circumstances, and irreparable injury may be done, not to mention the greater general reaction when an infected field is incised and manipulated.

Chronic Cholecystitis Without Stone

In this group, the pathological changes present in the gall bladder vary from unquestionable inflammatory changes of long standing to minimal alterations in histological structure that deviate very slightly, if at all, from the normal. Some of the unsatisfactory results from surgical treatment fall into this class as the operative treatment may be carried out where it is not needed. No situation requires finer judg-

ment than when confronted with a gall bladder exhibiting minor or questionable deviations from the normal in a patient who has given a history of flatulent dyspepsia with or without attacks of colic or in whom a stone has been reported by the roentgenologist, the absence of which is now obvious. The presence of localized hepatitis, the finding of enlarged lymph nodes along the ducts, changes in the color of the wall of the gall bladder, may offer suggestive but certainly not conclusive evidence of disease. Many surgeons have pointed out the unsatisfactory results following cholecystectomy in this group. There may have been an error in diagnosis in which disease of the kidney, pancreas, or colon or a functional disturbance, has been overlooked. The cholecystogram may not have visualized the gall bladder, due to error in technic and certainly one failure to show the gall bladder, especially if the dye is given by mouth, without strong clinical evidence, is not sufficient evidence on which to advise operation. Graham⁴ has recently reported a study of results of cholecystectomy in the stoneless gall bladder and found that the symptoms of pain, particularly typical gall bladder colic, is an important symptom in indicating a satisfactory result. Ransom,¹⁰ from this clinic, has recently studied end-results of cholecystectomy in the minimal diseased gall bladder and fails to find any criteria for good results. Good results were present in 33 per cent, fair results in 54 per cent, and slight or no improvement in 13 per cent. History, examination, and x-ray evidence failed to indicate which patients would be relieved. Without clear clinical or roentgenological evidence of gall bladder disease, one can defer operative treatment with equanimity as the results secured by attempting to treat by surgery gall bladder disease in its early and questionable stages are not good enough to warrant its use. In operation on the stoneless gall bladder, the more definite the pathology found in the gall bladder, the better is the chance of a good end-result. The diagnosis of chronic cholecystitis should be made with great caution and we now advise operative treatment on this diagnosis only after all other lesions that might have caused the symptoms have been excluded, after careful medical treatment has failed, when the symptoms are severe enough to warrant a major operation, and when the x-ray evidence is fairly clear.

Chronic Cholecystitis With Stones

This is the common form of gall bladder disease and delay in advising operative treatment in this group is as productive of poor end-results as is haste in advising operation in patients with mild inflammatory changes without the presence of stones. The mortality in surgery of the biliary tract is largely occasioned by complications of infection and obstruction in the ducts and liver, so often the sequelæ of neglected stones and infection in the gall bladder. The so-called silent gall stone is a myth and even though biliary colic is absent, other symptoms can usually be elicited and the potential danger of complications is always present. I believe that all gall bladders containing stones should be removed from patients who do not have definite contraindications to operation. Every attack they suffer may cause complications that will increase greatly the mortality.

Common Duct Stones

Failure to secure good results by surgical treatment may be the result of operation on the biliary tract with an incorrect diagnosis, it may be due to operation on the biliary tract so late in the course of the disease as to leave behind an irreparably damaged liver, pancreas or ducts, the result of long years of infection; it may be due to a residual functional abnormality of the gastrointestinal tract, due to previous long standing gall bladder disease, or lastly, it may be due to a failure to find calculi in the common duct at the time of the original operation. We have had twenty-six patients with proven common duct stones. Cheever,² Allen,¹ and Lahey,⁷ and others, have called attention to the importance of searching for stones in the common duct even though the classical signs of stone in the duct are not present. In Table II is shown the fact that jaundice was present in less than half of the patients with choledocholithiasis. Stones were present in the common duct more often without jaundice than with it. Stones are usually present in the gall bladder if they are present in the common duct, but in 19 per cent of our cases stones were present in the common duct and absent from the gall bladder. Jaundice due to stones in the common duct may be painless. In Table III is shown the incidence of choledochotomy in all of the patients, 58 times in 347 cases, or 19.5 per cent. Of those patients with

TABLE II. CHOLEDOCHOLITHIASIS
Number Cases—26

Jaundice	
Stones in gall bladder and common duct.....	10
No jaundice	
Stones in gall bladder and common duct.....	9
Jaundice	
No stones in gall bladder—stones in common duct	1
No jaundice	
No stones in gall bladder—stones in common duct	4
Previous cholecystectomy—stones in common duct	1
Previous cholecystectomy and choledochostomy	1

TABLE III. INCIDENCE OF CHOLEDOCHOTOMY

	Number choledochotomy	Total
1. Acute cholecystitis	0	13
2. Chronic cholecystitis without stones	1	58
3. Chronic cholecystitis with stones	18	231
4. Choledocholithiasis	26	26
5. Stenosis common duct....	6	6
6. Cholangitis	3	3
7. Gall bladder fistulæ or biliary fistulæ	2	4
8. Carcinoma of gall bladder..	2	5
	58 (19.5%)	346

Of those with stone (257), forty-four, or 17 per cent, had a choledochotomy. Stones were found in the common duct in 10 per cent.

stones, in either duct or gall bladder, the common duct was opened in 17 per cent of the cases and stones found in the common duct in 10 per cent of these patients. This finding of common duct stone differs from that reported by some other surgeons, as Lahey⁷ 20 per cent, Graham⁵ 7.9 per cent; we felt that we must have overlooked common duct stones in the past although in the entire group studied, only three patients returned with missed or recurrent common duct stones. In the past two years we have revised our criteria for choledochotomy and we now feel that the common duct must be explored more frequently than we have done in the past. Obviously if calculi in the common duct are palpable, they must be removed. In addition, we believe the common duct should be explored in every patient with a history of jaundice or who is jaundiced at the time of operation; when there has been a previous cholecystectomy or choledochostomy with recurrence of symptoms; when the common duct is found dilated; if the wall of the common duct is found thickened; if the head of the pancreas is hard and indurated, making palpation of

the ampulla unsatisfactory; when there has been a history of chills and fever following biliary colic; with cholangitis; and with the finding of a contracted gall bladder or of small stones or sand in the gall bladder.

Satisfactory exploration of the common and hepatic ducts is not easy. It requires first a good exposure with careful palpation of ducts. The common duct should be aspirated with a fine needle to assure one that one is dealing with the common duct and not the portal vein. The duct is then opened and carefully searched with stone forceps. Irrigation of the ducts with normal saline solution through a small catheter may bring to light stones from distant points in the ducts. Palpation of the ampulla is facilitated by passing a uterine sound into the duodenum and palpating along its course. In spite of the greatest care, stones may be missed. Cheever,² in 1929, suggested dilating the papilla of Vater in order to dislodge stones in the ampulla and to allow their passage to the duodenum. More recently Allen¹ has advised the routine dilatation of the papilla with a series of graduated dilators devised by Bakes in every instance in which the common duct is opened. Small stones may be pushed into the duodenum and others may pass normally after dilation that must be not infrequently overlooked. We have used these dilators a number of times in the past year without known harm and we feel with some benefit. The common duct is always drained after choledochotomy has been performed and no ill effects have been noted as a result of this procedure. It seems clear from the reported experience of many surgeons that some of the poor results obtained in the past from operations on the gall bladder were due to missed stones in the common duct. We must revise our indication for exploration of the common duct and explore more frequently. The operation is one of greater magnitude but does not increase the ultimate mortality if one considers the high mortality of secondary operation on the common duct. A word of warning may be uttered against the practice of leaving a rubber tube in the common duct as was frequently done some years ago. In two cases this tube remained in the common duct after several years with a recurrence of symptoms and jaundice. At operation the tube in both instances was found encrusted with bile salts so as to obstruct the duct.

Stricture or Stenosis of the Common Duct

Eight patients with this lesion appeared in the series, six of them had strictures following cholecystectomy and two had a diffuse narrowing of the common duct, due, we believe, to long standing infection. The lesion is a serious one with a very high mortality because of the long continued jaundice, the great liver damage and the operative difficulties.

Injuries to the common duct associated with cholecystectomy can only be avoided by a careful anatomical dissection in a dry field. Attempts to perform this operation in the presence of edema and inflammatory reaction making the exposure difficult, may be a factor. The common and cystic ducts should be clearly exposed and it is now our practice to leave the entire length of the cystic duct whether it be ligated or utilized for a drain. If the cystic duct is short or if there is any question about its anatomical relations, we have no hesitation in leaving a small amount of the gall bladder in the region of the cystic duct. No harm has been seen to occur from leaving the cystic duct and we feel this is a safe practice in that it makes injury to the common duct unlikely. It does not fall within the scope of this paper to discuss plastic repair of an injured common duct, which is under all circumstances a difficult surgical procedure.

Biliary Fistulæ

Four patients with this lesion were seen, two of whom had in addition fecal fistula connected with the colon. In all of them cholecystostomy had been performed. The opening into the gall bladder had not healed because of residual infection or stones. In every instance, a cholecystectomy cleared up the difficulty without any mortality.

Cholangitis

Three patients had cholecystitis and cholelithiasis with frank purulent inflammation in the common duct. These presented the typical clinical picture of chills and fever with jaundice. They are one of the distressing end-results of neglected cases of a lesion at one time limited to the gall bladder. If one may wait without anxiety for an acute infection of the gall bladder to subside, the same is not true of these patients with infection in the common duct. The common duct should be drained as soon as the patient can be prepared to withstand the operation. Removal of the gall bladder before the in-

fection becomes acute and spreads to the entire biliary tract will prevent this complication. All patients were operated upon without mortality.

Carcinoma of the Gall Bladder

Five patients with carcinoma limited to the gall bladder were seen, the diagnosis being made at operation or by the pathologist. All gall bladders contained stones, serving to emphasize the commonly found relation between stones and carcinoma. Carcinoma of the gall bladder is usually not amenable to surgical treatment and we can only urge the removal of gall bladders containing stones to prevent the carcinoma that occurs nearly always in association with stones.

The long controversy between the exponents of cholecystostomy and those of cholecystectomy seems now happily ended. The diseased gall bladder, which is the only one that should be operated upon, has already lost its function because of the disease. After any gall bladder is drained it rarely if ever resumes function. We have been interested in observing the behavior of gall bladders, formerly drained, to the Graham-Cole test, and in the study of a fairly large number we have seen but three preserve the ability to concentrate the dye. Therefore, if one remove only those gall bladders without a function, the patient will not miss the gall bladder, and if one drain a functioning gall bladder, it will rarely function after the operation so that the patient will be left with a nonfunctioning organ. End-results of cholecystectomy are much better than cholecystostomy. Infection and stones frequently recur in the drained gall bladder so in the otherwise uncomplicated case cholecystectomy is the operation of choice. Cholecystostomy undoubtedly has a place in the treatment of acute infections of the pancreas, gall bladder or ducts and in patients whose age or general condition will not warrant the more extensive operation. The inexperienced operator should perhaps choose the simpler operation as the chance of operative disaster is less.

The diagnosis having been made and operation decided upon, it is the duty of the surgeon to do all in his power to provide such pre- and post-operative study and treatment as will reduce the mortality to the lowest possible figure. I am impressed with the

fact that we have not yet learned the lesson of the value of time in preparing these patients as we have learned it in the surgical treatment of hypertrophy of the prostate, in hyperthyroidism, and in carcinoma of the gastrointestinal tract. Too often we tell the patient to enter the hospital one evening for operation the following morning. It is probable that much will be gained by taking a day or more for study and preparation. The glycogen stores can be raised to the maximum by giving the patient large amounts of glucose in flavored drinks for a day or two. Anemia can be relieved by transfusion and any lesions of the cardiovascular or renal systems will be benefited by appropriate treatment. Graham³ has called our attention to the value of the test of liver function as determined by the retention of phenoltetraiodophthalein in the blood serum. In the normal individual there is a retention of from 10 to 15 per cent of the dye within one-half hour; in the patient with damaged liver there may be a dye retention of from 50 to 90 per cent. Graham does not operate upon patients showing a dye retention of 50 per cent or more in one-half hour. These patients are treated by rest in bed, a high carbohydrate intake and calcium. Within from one to three weeks, these patients show a decided improvement in their dye excretion when the operation can be carried out with a much better assurance of safety. We have been using this test for about one year in every patient in whom we suspected damage to the liver function. In the entire group of patients with disease of the biliary tract, more than half of the mortality, exclusive of the jaundiced patients, was due to pulmonary complications and for the past four years we have used certain prophylactic measures to reduce the incidence of this complication. It has been well established that pulmonary complications are far more common in operations on structures in the upper half of the abdomen than elsewhere in the body. Most of these pulmonary complications are atelectasis of some degree or one of its sequelæ. The routine use of carbon dioxide in these patients has diminished the incidence of pulmonary complication to a remarkable degree. We now have carbon dioxide given as soon as the operative manipulations on the gall bladder have ceased and administered again before the patient leaves the table, usually when the

dressings are being applied. After the patient returns to bed he is given 15 per cent carbon dioxide and 85 per cent oxygen to the point of full amplitude of respiration every 15 minutes until he is fully awake. During the next 24 hours he is given carbon dioxide in the same manner every four hours and oftener if his respirations appear shallow.

The highest mortality in the surgical treatment of disease of the biliary tract will occur in patients with jaundice. The common cause of death in these patients is hemorrhage. There has until recently been no satisfactory test for the tendency to bleed. The clotting and coagulation time, the sedimentation rate, the appearance of purpuric spots on the skin, all fail to foretell the possibility of hemorrhage after operation. The depth of jaundice can be tested and the determination of the blood pigments is one of the few valuable laboratory aids in the jaundiced patient, but the amount of bilirubin in the blood is not an index of possibility of postoperative hemorrhage. Very recently Ivy⁶ and his co-workers have advocated a test called the Ivy Bleeding Time Test in which the bleeding time is determined on an extremity in which a pressure of 40 mm. of Hg. is maintained above the point of puncture. If bleeding continues longer than four minutes, hemorrhage may occur. Our experience with this test has been slight but we feel that within our limited experience it offers by far more hope of a prognosis for hemorrhage than any other tests previously suggested. It is thought by Ivy that the bleeding tendency is not due to the presence of jaundice but to alterations in the liver and the test may have other applications than its relation to the tendency to hemorrhage.

If the tendency to hemorrhage is present, as well as in the patient with high dye retention, operation should be deferred until the test gives an improved reaction. Transfusions are undoubtedly very well worth while. The administration of glucose has an important influence on both liver function and bleeding time. The use of calcium is probably worth while but the evidence is conflicting. Recent studies by McNealy et al.⁸ indicate that viosterol has a definite influence in diminishing the bleeding tendency in patients with jaundice due to obstructive lesions.

After operation, the most careful super-

vision must be given these patients not only to prevent pulmonary complications by the inhalation of carbon dioxide, but also by maintaining the patient's fluids and glucose at normal levels. If a biliary fistula has been established and the bile is lost to the patient over long periods of time, not only must this fluid loss be restored with an equivalent amount of normal saline, but the bile must be restored to the gastrointestinal tract. We have found a few patients who will drink the bile either plain or in grape-juice but most patients will not do so and it must be given through a duodenal tube. Another factor leading to unsatisfactory results is due to a continuation of flatulent dyspepsia after operation that may be functional in character or is often caused by residual damage to the entire biliary tract from the presence of long neglected stones and infection. Those patients must be carefully supervised for an indefinite time, their constipation corrected, their diet supervised, psychotherapeutic measures instituted to improve their mental state and appropriate drugs used to relieve spasm and apprehension. Operative treatment alone is not enough and without careful long continued supervision of the patient, will often give inadequate relief. Our knowledge of the function of the liver is as yet so meager and our tests of its function so inadequate, that most of the treatment given must be on an empirical basis. As we eventually learn more about the functions of the liver and gall bladder, our treatment of diseases of these organs will perforce improve as it is placed on a more rational and scientific basis.

Bibliography

1. Allen, A. W., and Wallace, R. H.: Technique of operation on the common bile duct. *Am. Jour. Surg.*, 28: 533-560, (June) 1935.
2. Cheever, David: Instrumental dilatation of the papilla of Vater and the dislodgment of calculi by retrograde irrigation. *Arch. Surg.*, 18:1069-1077, (April) 1929.
3. Graham, Everts A.: Lowering the mortality after operations on the biliary tract. *Ill. Med. Jour.*, 60:166-170, (Sept.) 1931.
4. Graham, Everts A., and Mackey, Arthur: A consideration of the stoneless gall bladder. *Jour. A. M. A.*, 103: 1497-1499, 1934.
5. Graham, Roscoe E.: Surgical therapy in gall bladder disease. *Canadian Med. Assn. Jour.*, 30:119-123, 1934.
6. Ivy, A. C., Shapiro, P. F., and Melnick, P.: The bleeding tendency in jaundice. *Surg., Gynec. and Obst.*, 60: 781-784, (April) 1935.
7. Lahey, Frank H.: The incidence and management of stones in the common and hepatic ducts. *Ann. Surg.*, 98:644-649, (Oct.) 1933.
8. McNealy, R. W., Shapiro, P. F., and Melnick, P.: The effect of viosterol in jaundice. *Surg., Gynec. and Obst.*, 60:785-801, (April) 1935.
9. Miller, R. H.: Acute cholecystitis. *Ann. Surg.*, 90: 644, 1930.
10. Ransom, Henry: Personal communication.
11. Smith, M. K.: Treatment of acute cholecystitis. *Trans. Am. Surg. Assn.*, 51:287, 1933.
12. Stover, H. B., and Owings, J. C.: The acute gall bladder as a surgical emergency. *Trans. Am. Surg. Assn.*, 51:281, 1933.

Discussion

DR. EARL INGRAM CARR (Lansing, Mich.): Doctor Collier has asked me to discuss the subject of acute cholecystitis; should one operate immediately or should one wait?

Acute cholecystic disease may be a first attack, a recurrent attack or an acute exacerbation of a chronic disease. The pathologist informs us that, while the presence of bacteria is to be expected as the usual etiology of an attack of an acutely inflamed gall bladder, it is not infrequent that he is unable to demonstrate bacteria. In either case, with bacteria present or absent, the clinical manifestations may be otherwise similar. The clinician, however, confronted with acute cholecystitis, reasons he is dealing with acute infection. This premise doubtless leads towards greater safety for the patient.

Understanding as to whether the acute attack is an initial one, a recurrence or one superimposed upon a chronic disease will make possible more accurate conceptions of changes in neighboring organs and structures, that is, changes in the liver, gall ducts, duodenum and pancreas. Determination to operate immediately or not to operate immediately depends, does it not, upon the probable answer to several questions?

1. Is the disease confined to the gall bladder alone?
2. Is the disease so acute that extension of the disease is imminent or that gangrene of the gall bladder impends or exists?
3. Is the patient so sick that a palliative operation is all that can be tolerated if immediate surgery is done?
4. Which is greater, the risk of the disease or the risk of an operation?

These and other questions arise and lead to the consideration of the gross pathology that takes place in acute cholecystic disease. Edema or swelling is commonly found and is usually conspicuous. Infiltration of the wall follows. Extension of inflammation to the ducts and to adjacent tissues with narrowing or occlusion of the ducts often occurs. Retention of gall bladder contents and distension of the gall bladder may thus result with the material within ranging from thin sterile bile to thick, virulent, bacteria-laden pus. Infection may penetrate the wall of the gall bladder. Impoverished circulation of the wall of the gall bladder may extend to gangrene. The inflammation, from bacteria or from chemical irritation or from both, together with the mechanical interference with function, if continued, causes cholangitis, hepatitis, pancreatitis, etc. Heart and kidney damage may ensue.

Consideration of gall stones is intentionally omitted because their presence is often incidental and the

injury and trouble caused thereby is largely otherwise mechanical. This mechanical interference with function is often a demanding indication for immediate surgery. Limited time deprives us of opportunity now for more than this passing mention of the considerations of cholelithiasis in connection with acute cholecystitis.

During the five year period from 1930 to 1934, a total of 1,738 deaths, or 347.6 deaths per year, were reported in Michigan from "Biliary Calculi" and "Diseases of the Gall Bladder." Of this number, 42 per cent were operated upon from one day to two months prior to death.

All of the foregoing suggests the considerations required of the surgeon and the estimations he must make. To operate or wait upon acute cholecystitis depends upon the acuity and extent of the inflammation. It depends upon the adjacent involvement. It depends upon the degree of disturbance of associated organs. It depends upon the previous changes in the gall bladder itself. The general condition of the patient and the defense the patient is providing, are large influential factors in determining the course of management.

There appears to be and there is divergence of opinion as to the best time for operation upon an acutely inflamed gall bladder. One surgeon of renown advises immediate operation, as the rule; another admonishes against immediate operation. As a matter of fact, are not both views extreme and fraught with certain dangers if followed literally?

It would seem that all cases of acute cholecystic disease must be individualized. Most painstaking determination of the pathology should lead to greater wisdom in selecting the proper procedure for the patient's present and future safety. In a communication before the Surgical Section of the Society in 1929, I urged that the surgeon should study and prepare his seriously ill gall bladder patients as one does the hyperthyroid case and I emphasized the two-stage plan for the gravely ill. In these a drainage under local anesthesia or under local supplemented with gas anesthesia may give an opportunity some weeks or months hence for a successful cholecystectomy with complete recovery.

I cannot believe that any surgeon would prefer to operate upon any organ or part in acute inflammation if palliative management would give an opportunity to operate during quiescence. We are not in sympathy with the argument that the patient may not submit later. Early operation is justified to prevent anticipated serious trouble or as an heroic stroke in a losing battle.

I regret more opportunity is not afforded me to comment upon and commend Doctor Collier's paper. It would have given me pleasure to do so but its excellence, fairness and completeness does not require it.

ACHIEVEMENTS IN CANCER CONTROL*

EARL INGRAM CARR, M.D., F.A.C.S.†
LANSING, MICHIGAN

Cancer is essentially the only prolonged disease that always terminates fatally if it is not treated. All arrestments and cures of this disease have resulted from treatment. Mankind is indebted to Medical Science for achievements which have established methods for the prevention and destruction of cancer. Application of present knowledge could reduce the incidence of cancer fully one-third according to estimates of conservative authorities.

It is certain that cancer was recognized at a very early date and it is shown that the Ancients had definite notions for treatment of it. Many facts, and that cancer was excised, are mentioned in the Papyrus Ebers B. C. 1500 and in the oldest literature of India and Persia. Hippocrates described cancer of the skin, breast, uterus and internal organs. Celsus, who lived at the time of Christ, excised breast cancer and advised against the removal of the Pectoralis major muscle, a moot point of Modern Surgery. Leonides of Alexandria, A. D. 180, operated cancer of the breast radically, including healthy tissue with his excisions and cauterizations. Arsenical ointment, mysteriously used by the modern-day cancer quack, was a product of the Ancient Egyptians.

Is it not appalling that a disease which has received consideration and attention since the early centuries of civilization has not become completely solved and its eradication accomplished? Is it not amazing that the recorded death rate of this same disease has been rising during the present generation, notwithstanding great advancement in science and discoveries of life's processes and phenomena? Charts 1, 2, and 3. Whatever prostration we have on this account, it is alleviated by much accumulation of knowledge concerning cancer and especially of the predisposing factors and of the behavior of tumors. In the dissemination of this knowledge lies the means to reduce the toll of this dread disease. The problem is one of education. Instruction has produced results in Tuberculosis. Appendicitis has superseded "Inflammation of the Bowels." The gospel of hopefulness, impressively preached, will incite many victims to action. From the early ages cancer has implied cer-

tain death and suspicion or knowledge that one was afflicted with cancer led to immediate belief of his approaching doom. Scientific advances have made a difference, and these achievements must be known to all. Persistent schooling along lines of prevention tend towards general acceptance and even towards the creation of habits. Let us recall and show some of the important highlights for encouragement in cancer control.

Facts About Cancer

It is misleading to say, without qualification, that we do not know the cause of cancer. There are many diseases about which less is known and of these we do not proclaim ignorance so baldly. As a matter of fact a great deal is known. Man's ordinary indifference to little things which do not trouble much, gives cancer an opportunity to become established. The insidious onset, painlessness as a rule, vague symptoms, small if any inconvenience, all these engender indifference, indifference of patient and, regrettably admitted, indifference of many doctors.

The exact and full explanation of the cause of cancer remains to be discovered but much has been learned of its nature and of its methods of attack. That it always starts as a local disease has long been generally accepted. Then, too, that there is a predisposing factor, the forerunner of the malignant entity, is probably the most outstanding belief of all. This is usually referred to as some form of chronic irritation. It may be chemical; it may be injury; it may be infectious; or, it may be another type of lesion, a benign tumor or some chronic inflammation. Not all forms of chronic irritation lead to cancer and again an ulcer or a chronic infection may continue for a long period of time before cancer begins. It is suggestive that some other factor is re-

*Read before the Wayne County Medical Society, Annual Cancer Meeting, Detroit Institute of Arts, Detroit, Michigan, December 3, 1934.

†Dr. Carr was graduated from the medical department of the University of Michigan in 1910. His practice is limited to surgery. He is consulting surgeon to the Edward W. Sparrow Hospital and also surgeon to the St. Lawrence Hospital, Lansing. He was formerly chief consulting surgeon of the Michigan Department of Health and surgeon of the Orthopedic Clinic of Lansing.

*The principal Causes of Death
in the United States in 1933*

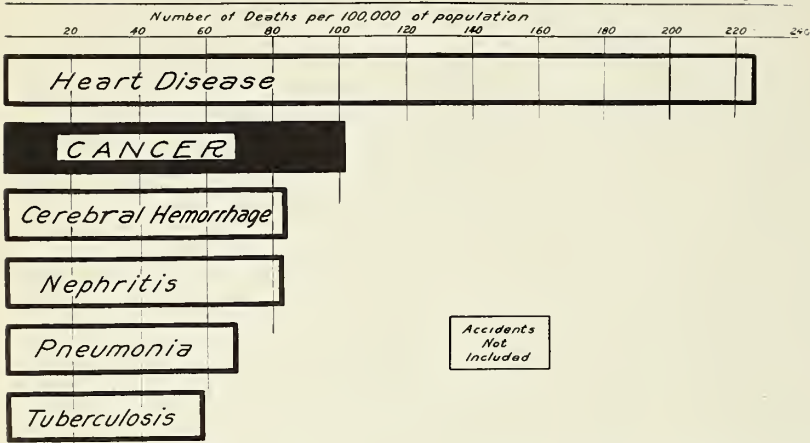


Chart 1

*CANCER DEATHS
The rate in each State 1933*

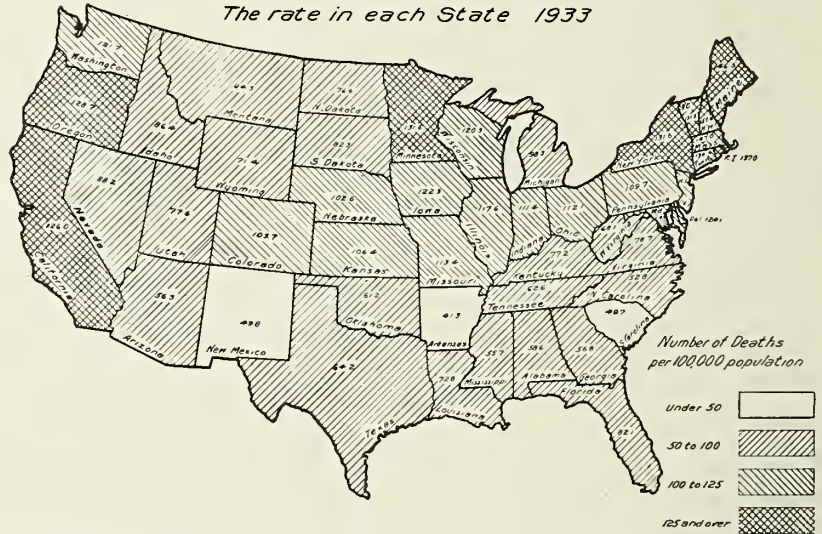


Chart 2

*CANCER DEATHS IN THE UNITED STATES
1933*

*The location of the lesion in the
128,475 Deaths reported*

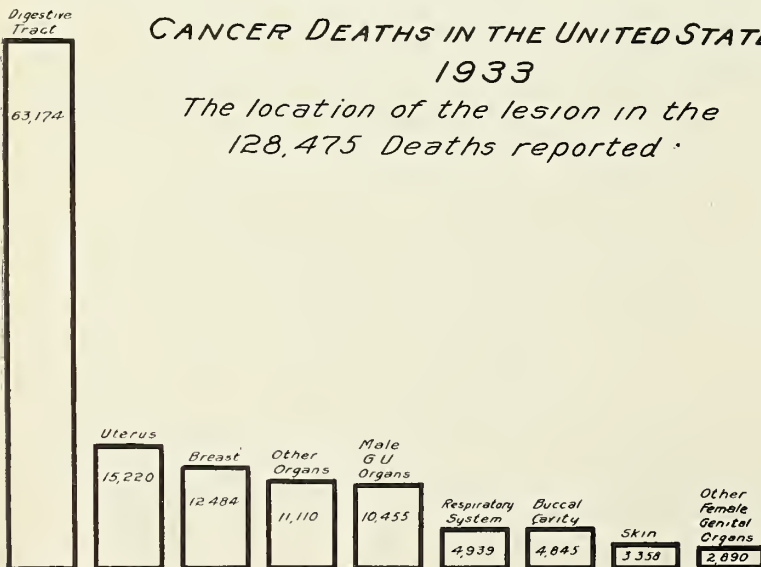


Chart 3

quired, laying the way open for a parasitic theory which not only remains unproven but is quite generally denied.

The local malignant disease is always a cellular new growth composed of the same type of cells as the organ or tissue in which it arises, but differentiated and of a reversion type. In other words, these new cells are simpler than the parent cells, resembling embryonic characteristics. The multiplication of the new cells is usually rapid and new growth occurs by extension and invasion of the parent tissue. No theory as to the cause of this occurrence has ever been proven and this is why it must be admitted that the cause of cancer is yet unknown.

When the individual with this local disease has other parts of the body invaded, it comes about by separate groups of these new cells being conveyed through the lymph spaces or blood stream. The new part or organ thus invaded does not change the type of cell. Wherever a cancer is found, the type of cell is the same as a younger or reversion type of the cells of the organ in which the cancer originated.

While this is more or less familiar to the physician, it leads to the point that cancer is a disease of the cell and the question presents as to whether the cause arises within or without the cell membrane. It is evident that there is a biologic change in the cell. Attempts to establish the cause as a bacterial invasion have remained unconvincing because secondary cancer remains the same type as the primary lesion rather than the type of the organ secondarily invaded. It would seem then that the change is within the cell, for dissemination of the disease, that is, metastasis, is transference of the malignant cells themselves.

Just what part the general health and physiology of the individual play in the susceptibility of cancer has received much attention and study. Metabolism, vitamins, hormones, internal secretions, et cetera, are subjects of research. Cancer is recognized as a disease resulting from worn-out tissue, worn out by its effort to withstand insult. As years go by insults increase in occurrence and extent and toleration is diminished by the atropic and degenerative changes of age. Thus age plays an important rôle. Chart 4 illustrates the increased incidence as age advances. As expectancy of life increases by improved conditions in public hygiene, it follows that there is opportunity for a

greater number of cancer cases. At the time of the Romans, life expectancy was less than twenty-five years and today it is more than fifty-six years, the increase occurring particularly in recent years. A way should be developed to allow for this age factor in

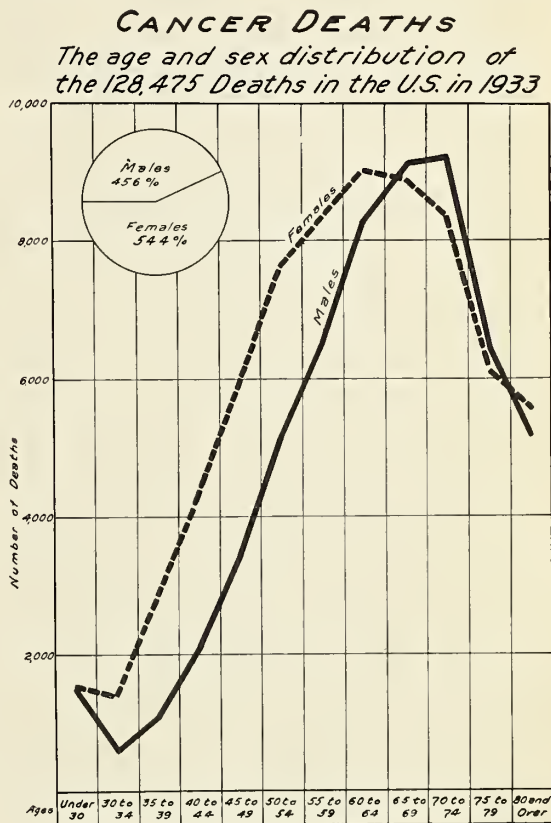


Chart 4

statistics of former decades to permit proper comparison with the present. Some part, at least, of the apparent increased incidence of cancer is thus accounted for.

The urban incidence of cancer greatly exceeds the rural incidence (Chart 5). Does the opportunity of more exposure to sunshine and an out-of-door life explain this difference? Are there less chronic irritants in the rural life than in the urban? Or are vitamins more available in the country? Speed of living, anxiety, irregular habits of the urbanite are a decided contrast and opposite to usual rural living. Does high tension living predispose to cancer or increase susceptibility? Some ruralites die of cancer in city hospitals and their deaths are not allocated to the rural districts from which they originate. Probably this discrepancy is not large for it is said that most cancer

victims die at home. It must be mentioned that it is asserted with great complaint that youth has left the farm. The age factor would seem to be against a lower rural incidence on this account.

Heredity, pro and con, has had many

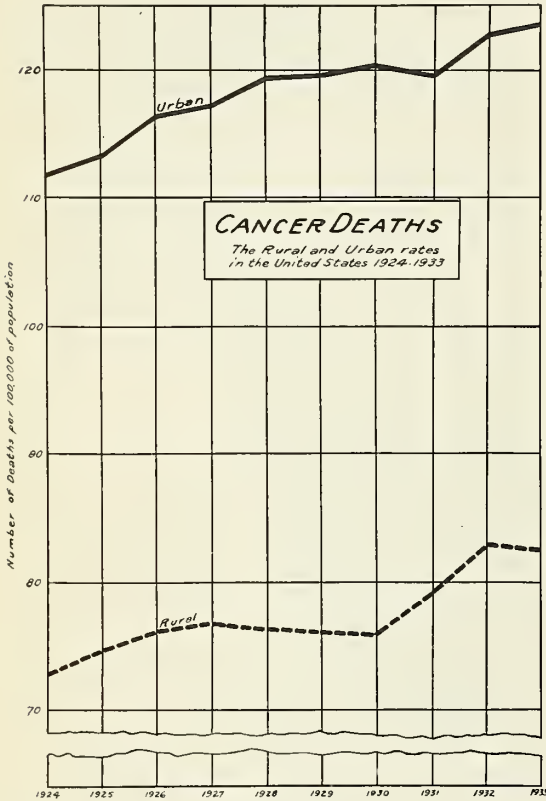


Chart 5

advocates. Conclusions are generally held in this regard that cancer is not inherited. The tendency to have cancer may be inherited but not the disease. The intermarriage of families with tendencies for cancer is opposed. Given the choice to select a mate from a family with cancer tendency and from a family with no cancer history, all other considerations being equal, our advice is to select the latter, if the biologic urge can be held under control.

Susceptibility

The determination of susceptibility to cancer in the human has been sought and its practicality has seemed reasonable. Such determinations are possible in other diseases and are of inexpressible value. Efforts along this line in cancer have been without avail. Susceptibility to cancer or to analogous dis-

ease appears in every form of life. This occurrence in plants and lower animal life has afforded opportunity for observation and study. Certain breeding of plants and animals has increased susceptibility so that a lesser irritation would result in cancer and conversely, by other breeding, susceptibility has been reduced. The common predisposing factor is always chronic irritation.

MacCarty, Broders, and others have taught interpretation of the degree of malignancy from the microscopic appearance of the cancer cell. The degree of deviation of the cancer cell from the normal cell and the relative number of differentiated and undifferentiated cells determine the estimate of the degree of malignancy. Broders' index of malignancy has aided in determining which cases justify extensive operation and vice versa. Bowing found after employment of radium and x-ray that the more severe grades of cancer, grades three and four of Broders' classification, may be so reduced to grades one and two that the formerly inoperable cancer may be successfully removed.

Research

Investigation in the field of cancer is continuing in great diversity in most countries and extends into nearly every branch of science. Many outstanding achievements of experimental research have developed within recent years, pertaining to the transplantation of malignant tumors, heredity, susceptibility, methods of producing tumors in certain plants and animals, determination of the resistance of the cancer cell against various agents and to other subjects. Cancers in many forms of living things have been studied and compared. Much foundation has been laid.

The work of Maude Slye of Chicago on many thousand mice supports views previously alluded to. By cross breeding and maintaining accurate records of family history and of tumor development she showed that susceptibility and resistance to cancer are definitely inherited. She says: "There are apparently two factors necessary to produce cancer. If either of them could be wholly avoided it might be possible to prevent it. They are (1) an inherited local susceptibility to the disease, and (2) irritation of the appropriate degree applied to the cancer susceptible tissues."

The observation of carcinoma of the stomach in certain rats led to a high light in ex-

perimental cancer research. It was discovered that the rats fed upon cockroaches infested with parasitic worms. The tracing of this sequence gave the experimental production of stomach cancer by Jensen. He could produce cancer in this way by feeding other rats infested cockroaches.

Little produced mammary cancer in castrated male mice by implanting ovarian tissue in the glands of these animals. In another way Bag produced mammary cancer in a strain of mice, known to have a low hereditary incidence, by rapid breeding, withdrawing the young at birth. Ewing considers this illustrative of cancer production by combining local irritation and functional overactivity.

The experimental production of the so-called Tar cancers has led to the discovery by Kennaway and Cooke of a crystalline compound in tar (dibenzanthracene) which in minute amounts produces carcinoma in epithelial tissue and sarcoma in connective tissue of rats. In this manner cancer is exhibited rather promptly and in a high proportion of the cases. This work seems of high importance and is much emphasized.

The unintentional production of cancer in early x-ray workers showed one of the first methods of reproduction of malignant growths. Skin cancer and angiosarcoma in granulation tissue have been produced by this method both in man and animals. X-ray cancer is destructive to the theory of parasitic origin of cancer.

The foremost foundation for belief that cancer has a single cause is the well known work of Rous in a study of a group of chicken sarcomas which could be transmitted by a filtrate. Much research has been done by Murphy, Griffith, Dawson and others in an effort to determine whether this filtrate contained a living virus or chemical substance.

The work of Smith, who produced cancer in plants by the introduction of bacteria found associated with certain plant cancer, at first seemed suggestive that an infectious cause had been discovered. Soon, however, it appeared that chronic irritation was caused by the inoculations and then cancer ensued.

Out of all of this, opinion seems justifiable that cancer is a disease with many entities and with distinct characteristics.

It is interesting and it is desirable that both the profession and the public know

something of the way cancer material is obtained and controlled for study and research. Methods to provide cancer for this purpose may be suggested by some of the foregoing. To make it plainer, however, further description follows.

There are four main methods of obtaining cancer tissue; two deal with its production and two with its growth and culture. Of those dealing with production of cancer the most natural is the intensive inbreeding of laboratory animals with known high incidence of cancer. There is no artificial factor in this method and it gives particular advantage on this account. The time required to wait for animals to mature and arrive at physiologic age for cancer is a disadvantage. The other method of inducing cancer is by the use of a chronic irritant. Tar or a derivative of tar is commonly used. A new growth arises at the site of frequent painting of the skin with the known irritant. Other irritants that are sometimes used are parasitic infestation of rats, another is repeated exposure to actinic rays, x-rays or radium and still another is repeated mild freezing with carbon dioxide snow. The advantage of the use of irritants is their controllability and the disadvantage is the unnatural intensive process.

Of the two methods of growth and culture of cancer cells the newer is the actual growing of cancer, independent of adjacent normal tissue. It is really cancer tissue culture and gives opportunity for unhampered macroscopic and microscopic observations of the development and activities of the cells. The disadvantage of this method is the isolation from normal tissue; or, it might be said, the disadvantage and the advantage are one and the same. The other method of creating cancer is by transplantation of small pieces of the tumor in other animals of the same species and strain from which the cancer first appeared. Following known technic this method of propagation of cancer is simple and gives good opportunity for study, under favorable and unfavorable conditions. It does not permit much for the consideration of the origin of tumors.

These methods of producing cancer for research will probably be preserved, it is said, with the possibility that new discoveries will augment them. These advances are made by methods in Biology and Chemistry or in combination and have very little to do with clinical procedure.

Clinical Achievements

If we turn our attention in cancer control to the purely clinical accomplishments we will look into the experiences of individual doctors, clinics and hospitals. The great coördinated attempt along this line started in 1932 when the American College of Surgeons, having attempted a major project of establishing acceptable and proven evidence of the "Curability of Cancer," held its first of a series of symposia on this subject and started the collection of five or more year cures.

In introduction of this "Curability of Cancer" project, Dr. Franklin Martin set forth several expressed desires. It was hoped that doctors and public would be impressed by the possibilities for cure and by the need for early recognition and treatment, that publicity on the incidence of cancer would arouse demand for and better facilities for regular health examinations, that there is appropriate treatment even for late cancer when occasionally more than palliation is accomplished and that the assembling of records of cancer cures will tend to create a helpful psychology. In short, it was hoped that such a program would inculcate intelligent hopefulness and displace fear and ignorance.

8,840 cases of five or more year cures were assembled from the reports of speakers in this 1932 Congress of the American College of Surgeons, from registered cases with the college and from a survey of the literature. This gave material for an exhibit which attracted wide and general public attention the first year of the World's Fair. This was a rare opportunity to observe the public's interest in the subject of cancer and led to great encouragement and stimulation to proceed with the program.

The 1933 Curability of Cancer Symposium of the American College of Surgeons greatly augmented the list of five or more year cures, swelling the number to more than twenty thousand. For this past year, the second year of the Century of Progress, this supplied a Curability of Cancer exhibit which was viewed and studied, it is said, by an immense proportion of all visitors to the fair. The publicity was most gratifying in its effectiveness as was the educational exhibit of the American Society for the Control of Cancer and others.

This year the list of five or more year cures, collected by the American College of

Surgeons, has been further increased by 2,077 cases. The accompanying list shows the complete recorded figures to and including 1934. There has been revision, as is indicated, to eliminate the several duplications which have resulted. As might be expected, more than one author had treated a given case and had included it in his report. The corrected grand total to date of cancer cures, five years and over, is 24,440.

CANCER CURES 1932, 1933 and 1934

Cervix	7,453
Fundus	1,103
Ovary	558
Vagina, vulva, perineum and urethra	128
Breast	6,467
Mouth and lip	2,351
Stomach	756
Colon and rectum	2,275
Kidney	159
Bladder	374
Prostate	55
Testis	49
Penis	27
Skin	1,060
Thyroid	269
Larynx and hyopharynx	238
Eye	30
Bone	93
Upper jaw and antrum	127
Lower jaw	90
Others	778

Grand total cancer cures five years and over 24,440*

SOURCES OF CASES REPORTED

Reported at Clinical Congresses prior to 1934	20,534
Registered cases at American College of Surgeons	1,829
Reported at 1934 Clinical Congress	2,077
Total	24,440

The collection of this enormous number of "cures" fulfills a reasonable realization of the hopes expressed at the outset of this great undertaking. Chart 6 graphically displays the "cures" by locations of lesions. It occurred to the writer that an attempt to compare this list of 24,440 cures with the deaths from cancer in the United States for one year might indicate something of the effectiveness of treatment and possibly otherwise. Chart 7 shows an allocation by location of lesion of cancer deaths in the order of occurrence in the United States for the year 1933. The deaths are represented by a curve. In contrast to this a second curve of the cures is made by lo-

*This total figure is not larger than reported in 1933 on account of the elimination of individual cases which have been reported previously by more than one author.

cation of lesion in the same order as the former. If treatment were equally effective regardless of location of lesion the second curve would appear similar to the first curve. But we find it is not like the first curve. This comparison shows plainly that

the uterus, breast, buccal cavity and skin cures are relatively higher in proportion to the number of deaths than are the cures of the digestive tract, male genito-urinary tract, respiratory system and "all other organs." We are here dealing with two

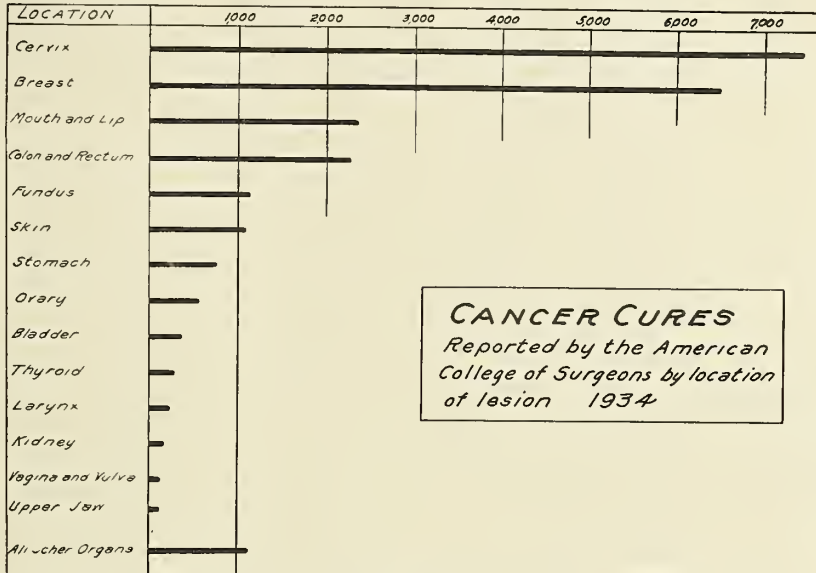


Chart 6

CANCER
Comparison of the number of deaths in 1933 with the number of Cures (A.C.S.) by location

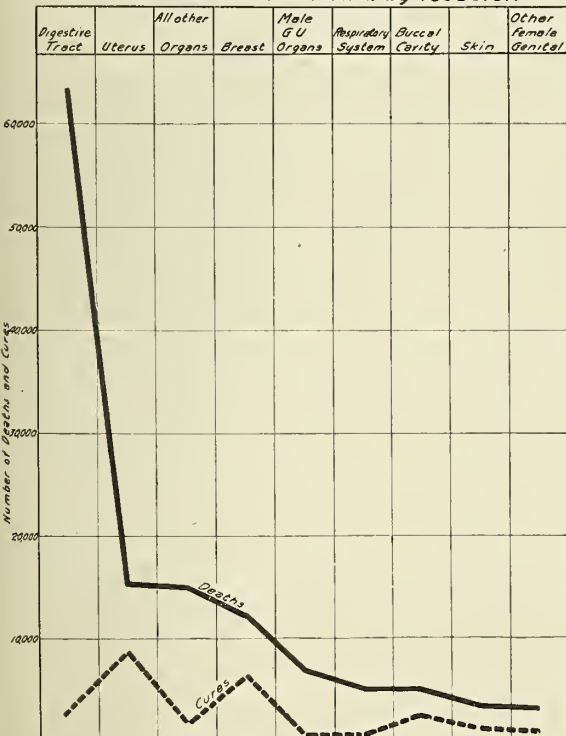


Chart 7

variables which prevent comparison but it is suggestive and interesting and not unduly misleading.

Education

Service to mankind is the persistent urge of the physician. The satisfaction thereby obtained is frequently his largest reward and often it is a huge recompense. Through the ages he has striven to cure disease. He has devised methods and he has not withheld them. As he has advanced in science he has learned many things. Foremost in his store of knowledge lies the necessary acceptance that there are many more things he does not know, that he may never know. The treatment of advanced cancer has been one of his worst discouragements.

For centuries the physician's effort was directed largely individually. He has come to perceive, and this more or less recently, that provision may be made for the many, that the future calamities of disease may be partially provided against with great advantage or the time of occurrence may be extended. Preventive and prophylactic methods have been formulated and created. Public Health has become a business to be administered.

Many diseases have defied treatment in advanced stages. Prevention and early recognition, either or both, have eliminated or reduced their occurrence. Advanced tuberculosis remains as essentially fatal as it ever was but by rather simple rules of hygiene and living it has been reduced within a generation from the second cause of death in the United States to the sixth, (Chart 1). Other illustrations are too numerous and obvious to be included now.

Many factors have hindered in advancing the control of cancer. Besides the shortage of science and knowledge the pessimism of the profession and of the public have discouraged action. Attention has been directed to the recognition of cancer by the Ancients and the evidence is clear that they feared it greatly. This fear has been passed down. Ignorance or at least resistance against intelligence accompanies fear. Hopelessness is another factor. This is not confined to the public. It is regrettable to admit that the source of hope, the providers of prevention and treatment, are not fully preventing and persistently treating.

The necessity of education about cancer has become apparent, education of the public and education of the profession. The American Society for the Control of Cancer has become the great organization curbing, propelling and coordinating education of all, along the principle implied in its name.

The American Medical Association, the bulwark of power for all of the Medical family in activities, clinical, economic and scientific, has, through its journals, library, committees and organization, been a potent influence in cancer control education.

The State Medical Societies, County Societies and others and the State Departments of Health have taken a part in the cancer education program or are being addressed to do so. The American Society for the Control of Cancer has a state chairman in practically every state in the Union and a branch is being established in Hawaii. This society has four regional field representatives. A campaign of education for secondary school pupils is now being prepared by the society with the belief that information on prevention and control of cancer can be efficiently absorbed by the young. The American Society is also organizing the National Federation of Women's Clubs with more than two million

members to carry on a lay education against cancer. In at least thirty states the American Society for the Control of Cancer are stimulating and supervising, under the direction of local medical societies, five-year educational programs for the profession and laity.

The story of Massachusetts shows what a state can do in trying to meet the cancer problem. The complete cancer program of that state appears in a volume entitled "Cancer and Other Chronic Diseases in Massachusetts" by Doctors George H. Bigelow and Herbert L. Lombard. The State Department of Public Health assumed an active leadership in developing a progressive program for cancer research, diagnosis, treatment and education. In research the State Department of Health maintains a division for the purpose. In diagnosis cancer clinics are sponsored throughout the state. For treatment there is a cancer hospital at Pondville. In education both the profession and laity are considered. Clinics, lectures and a "cured cancer clinic" supply information and ways to disseminate it.

Other states have attacked the cancer problem,—New York, California and others. Activities against cancer vary but under leadership from the national organizations systematic plans are being evolved. Michigan has been variously organized for many years. Twelve years or more ago the state was divided into districts with a designated chairman for each. His duty was to organize the County Medical Societies for the observance of a cancer week when cancer literature was distributed, educational programs were provided for the public and scientific programs arranged for the profession. During this week free diagnostic services for all with tumors or suggestive lesions were offered the public in the doctors' private offices, free choice of doctor being permitted. This was repeated in many counties for several years. Shortly after the war a Tumor Clinic was organized in Grand Rapids and was directed by Doctor Richard R. Smith and his associates. Tumor Clinics in Detroit and the Wayne County Medical Society Tumor Registry represent the desired endeavors suggested at the present time by the American Society for the Control of Cancer.

The American College of Surgeons has assumed responsibility for the inspection of clinics, when established. The figures on

cancer clinics for 1934 are given in the accompanying table:

CANCER CLINICS

1934

Approved cancer clinics.....	97
Provisionally approved cancer clinics.....	55
Approved cancer diagnostic clinics	23
Hospitals with departments conducting approved cancer clinics	6
Cancer clinics which are not yet ready for rating by the College	58
Hospitals definitely contemplating the organization of cancer clinics	80

The Outlook

In the foregoing, brief record has been made of some of the important achievements in cancer control. It appears that the major forms of cancer which cause most of the deaths are due to controllable factors, generally some form of chronic irritation. It is a sound conclusion that cancer is usually a result of neglect. The human being is a machine which wears out. It wears out faster with broken parts. It functions better when parts are kept in repair. Like all fine machines, the human machine can go along for a time with im-

pairments but the length of life is reduced if prompt repair and care is not continually provided.

Periodic examinations will overtake troubles in the human machine. It may often lead to the prevention even of the beginning of trouble.

However, it may be a long time before all the public will have regular examinations. It may be a long time before all the doctors will recognize early lesions of cancer. It follows then that in prevention lies great possibilities and that plans for education of public and profession must be carried far into the future. Facilities for treating cancer must be increased and made accessible. The fears and pessimism of the past must be supplanted by a knowledge of what science offers.

While cancer is killing at the rate of nearly ten per cent of all deaths at the present time, it seldom kills those who seek yearly health examinations by competent physicians of medicine and who accept and follow the advice thereby obtained.

INTRACRANIAL ANEURYSMS

FRED P. CURRIER, M.D., and DAVID B. DAVIS, M.D.†

GRAND RAPIDS, MICHIGAN

Papers on intracranial aneurysms invariably appear in journals which are devoted to the several specialties and are, therefore, seldom seen by the general medical reader. Yet it is the general medical man who usually first sees these patients and frequently has the complete management of them. It is he who should endeavor to clinically differentiate an intracranial aneurysm from the several intracranial conditions which it simulates. This is not always feasible, but we believe that certain factors may be pointed out which will make it possible to approach such cases more intelligently.

A differential diagnosis is necessary before any rational therapy can be instituted, and it is also necessary if one is to make a prognosis. The first question has been adequately dealt with in the numerous excellent reviews on the subject, so mention will be made of only the main points. We shall give two brief case reports to illustrate the second question, which is so vital to the patient's family; and, incidentally, many a professional reputation has been made, or lost, in the giving of a prognosis.

According to Freeman, almost all intracranial aneurysms are developmental anom-

alies. They develop at a bifurcation of a vessel where the muscular coat is the weakest and they are most commonly found in vessels of, or arising from, the circle of Willis. It is now known that inflammatory change in the vessels due to syphilis is a rare cause of aneurysms, and as Freeman states: "The aneurysms that occur in known luetic conditions are by no means all of specific etiology." Mycotic aneurysms due to embolism in states of sepsis or endocarditis are infrequently seen.

The aneurysm may manifest itself by symptoms produced by pressure on the various cranial nerves at the base of the skull or by spontaneous subarachnoid hemor-

†Dr. Fred P. Currier is a graduate of the University of Michigan, 1916. His practice is limited to Neurology.
Dr. David B. Davis is a graduate of the University of Michigan, 1927. His practice is limited to Neurology.

rhage. In our two cases and in a review of the literature, we have found the latter method to be the most frequent. Beadles in his review of 555 cases found that in 46.3



Fig. 1. Aneurysm of right middle cerebral artery.

per cent the first signs of the presence of an aneurysm were those of apoplexy in patients who were previously in good health.

In arriving at a conclusion as to the cause of the blood in the spinal fluid, it must be remembered that all cases of spontaneous subarachnoid hemorrhage are not due to rupture of aneurysms. Arterial sclerosis is probably the most common pathologic condition responsible for arterial change with "rupture and hemorrhage into the subarachnoid space irrespective of the age of the patient."

Case Reports

Case 1.—Mr. J. V., aged thirty-eight, was seen at his home on the morning of August 20, 1934. The patient's father was living and well at the age of seventy-two; the mother had died at the age of sixty-five, having been an invalid for twelve years. Her illness was described as a tremor and partial paralysis of the left arm and the left leg. She gradually had developed a contracture of the left leg, which, in the last years of her life, caused the leg to be drawn up close to the abdomen. Four years before her death, she was said to have had a "stroke," resulting in a partial paralysis of the right side and an aphasia.

The patient, his mother, two brothers, and one sister had had sick headaches over a period of many years. The patient's headaches usually were relieved by vomiting.

His wife and two children were living and well. She described him as a nervous type of individual, who always had stammered slightly. There was

no history of his ever having had an operation, injury or infection.

On August 19, 1934, he retired at 11:30 P. M. seemingly perfectly well. At 5:00 A. M. he began to breathe unusually heavily and his wife, on awakening, tried to arouse him but found it impossible to do so. Within a few moments, she noted jerking of all his extremities. The family physician was called, and as he decided on neurological consultation, the patient was seen by one of us (F. P. C.) at 8:00 A. M. At that time, the patient was in coma and was hypotonic in all his muscles, with all deep reflexes decreased and no pathological reflexes present. An ophthalmoscopic examination showed normal fundi, so a spinal puncture was done. The fluid removed was thick and dark, like venous blood. Two hours later, at 11:00 A. M. the patient suddenly became cyanotic and died.

Autopsy.—The examination was limited to the examination of intracranial contents. The striking thing on opening the skull was the profuse subarachnoid hemorrhage. After lifting the brain, great pools of blood were noted at the base, especially in the cisterns. On careful examination, all pial vessels and the circle of Willis appeared to be intact. A lengthwise cut in the left hemisphere revealed no abnormalities. A similar cut in the right hemisphere showed considerable blood in the region of the middle cerebral artery. When the artery was reached, it was found that there was an aneurysm about 2 cm., in diameter attached to its medial and posterior surface (Fig. 1) at a point where the artery divides into its three cortical branches. There was a small and partially organized clot on the lateral surface of the aneurysm.

Comment

This case illustrates the clinical picture of the rupture and subsequent hemorrhage from a large intracranial aneurysm. Prior to the final rupture there had been, apparently, a small hemorrhage because of the presence of the small partially organized clot on the outer surface of the vessel. No symptoms had been produced by the clot.

As the spinal fluid contained almost clear blood, one would surmise the rupture of a large vessel or an aneurysm. From the history, there was no evidence of syphilis and physical examination did not show the presence of either arterial sclerosis or cardiac valvular disease, so there was little on which to base a cause of the vascular disturbance which would produce such a profuse spontaneous subarachnoid hemorrhage. In Beadles' series of cases, it was found that in aneurysms of the middle cerebral arteries, symptoms occurred in rather less than 22 per cent. He did not believe it possible to diagnose an aneurysm of either middle cerebral artery during life. The sick headache was the only symptom which our patient had; certainly not a symptom which would make one think of the presence of a cerebral aneurysm.

Case 2.†—On February 6, 1935, a physician was called to see a woman, aged forty-five, who was suffering from severe headache, which was generalized over the head although especially severe in the back of the neck. The headache came on suddenly. The physician administered a small dose of

oratory tests, such as blood count and urine examinations, were normal.

She gradually improved and was able to sit up by the twelfth of March. On the following day, she suddenly gasped for breath, then stopped breathing, and, although the interne administered stimulants, the heart continued to beat for only ten minutes longer, then ceased.

Autopsy.—The gross appearance of the superior surface of the brain was quite normal. At the base, on the anterior surface of the medulla, pons, and as far forward as the chiasm, there was considerable blood. From the bifurcation of the right vertebral artery, with the basilar artery to a point about one cm. below the bifurcation of the posterior-inferior cerebellar artery, there was a partially organized clot. Under this clot there was an aneurysm of the vertebral artery at the bifurcation of the posterior-inferior cerebellar artery (Fig. 2). It measured 9 mm. by 4 mm. A rupture of its inferior surface was noted.

The remainder of the autopsy was without important findings.

Comment

This case is one example of an intracranial aneurysm in one of its more common locations. The size of the aneurysm is about that usually found in aneurysms of the circle of Willis or its immediate branches. The slow leak of blood into the subarachnoid spaces some days before the final rupture made it impossible for one even to suspect an aneurysm. Instead, one would consider spontaneous subarachnoid hemorrhage as a possible explanation of the presence of blood in the spinal fluid. According to Strauss and Globus, spontaneous subarachnoid hemorrhage is due to small ruptures in arterial sclerotic cerebral vessels. In all eleven of their cases which came to autopsy, they were able to find either general or focal evidence of the arterial sclerosis. Many cases of spontaneous subarachnoid hemorrhage, due to causes other than ruptured aneurysm, will recover, while almost all cases of ruptured aneurysm die as a result of the first hemorrhage. Occasionally, a patient will live for a short time and die after a second rupture, as in this case.

Summary

In considering a differential diagnosis in spontaneous subarachnoid hemorrhage, certain conditions can be ruled out rather readily. Bleeding from a brain tumor is so rare that it could be dropped from consideration. The clinical picture might resemble that of an encephalitis due to stupor, meningeal signs, ocular palsies, and the fever that occurs in both conditions. It is, however, rare to find blood in the spinal fluid in encephalitis.

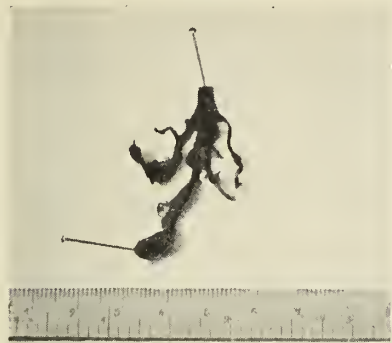


Fig. 2. Aneurysm at point of bifurcation of right posterior-inferior cerebellar artery from right vertebral artery.

morphine, and, as the patient soon became cyanotic, she was taken into the hospital.

She always had been well until four days prior to the onset of the headache, when she fell down stairs and landed on her buttocks with a sharp jolt. The family history was irrelevant. For a few months before her sudden illness, she had worried considerably over financial matters.

On entering the hospital, a general medical examination revealed a normal throat, heart, and lungs. The blood pressure was 110:60, and the pulse rate was fifty-four. There was a flushing of the face. A complete neurological examination was negative for organic findings. Spinal puncture showed a rapid flow of fluid, bright red with blood.

February 8, 1935.—No change in neurological examination on this date. Mentally, the patient was disoriented and had practically no memory for the happenings of the two previous days.

February 9.—On this date, 35 c.c. of bloody spinal fluid were removed and the patient mentioned that she had less headache after this puncture.

February 10.—Another spinal tap was done with the draining of 10 c.c. of pink fluid. There was no change in the patient's condition.

February 18.—She had been improving gradually in the eight days, was oriented, memory had improved, and she was almost free from headache, so she was discharged from the hospital, with instructions to rest in bed at home.

On February 21, the patient was again brought into the hospital in a confused mental state and suffering from a severe headache. The latter had come on suddenly, eighteen hours previously, following exertion, as she did not follow instructions and insisted on getting out of bed. In her confused state, she continuously screamed and tossed about, so it was difficult to obtain a satisfactory neurological examination. A cursory examination, however, revealed no abnormal findings. The blood pressure was 138:70, and the pulse was sixty.

No spinal tap was done until February 25, when 20 c.c. of fluid were removed. The flow at first was a light yellow, changing to a pink during the latter part of the flow. Pressure at that time was 312 mm. of water. The Kahn test on the spinal fluid and the gold curve were negative. Other lab-

†Case 2 is reported with the permission of Dr. Marcus B. Tidey.

There might be some difficulty in differentiating cerebral aneurysm from apoplexy, if it were not for the fact that there is rarely any blood in the spinal fluid in the latter condition. If there were, it would almost always be in association with focal brain symptoms due to brain destruction. Competent observers have agreed that it is impossible to distinguish the bleeding of a ruptured aneurysm from that due to rupture of arterial sclerotic vessels.

The prognosis in all cases of spontaneous subarachnoid hemorrhage should be de-

cidedly guarded, for, as we have tried to show, there is no way to determine which cases are due to aneurysm; and almost all patients with aneurysm die with the first rupture.

References

1. Bagley, Chas., Jr.: Spontaneous cerebral hemorrhage. *Arch. Neurol. and Psych.*, 27:1133, 1932.
2. Beadles, C. F.: Aneurysms of the larger cerebral arteries. *Brain*, 30:285, 1907.
3. Freeman, W.: *Neuropathology—The anatomical foundation of nervous diseases*. W. B. Saunders Company, 1933.
4. Schmidt, M.: Intracranial aneurysms. *Brain*, 53:489, 1930.
5. Strauss, I., Globus, J. H., and Ginsburg, S. W.: Spontaneous subarachnoid hemorrhage. *Arch. Neurol. and Psych.*, 27:1080, 1932.

THE BIRTH CONTROL MOVEMENT* Its History, Background and Development

GEORGE KAMPERMAN, M.D., F.A.C.S.†
DETROIT, MICHIGAN

On first thought it surprises some to find that an obstetrician has any interest in Birth Control. Often it is indicated that this is looked upon as an inconsistency. But it is a fact that the obstetrician is confronted with this problem perhaps more often than any other type of medical practitioner. He not only is presented with these problems by his own patients, but numerous such problems are referred to him by his brother practitioners when they do not care to wrestle with the issue themselves. So it really is not strange that in general one finds obstetricians everywhere interested in the problems of family limitation.

When one looks into the subject he is amazed to find that the modern movement has a background that seems to date back almost to the beginning of history. He is on first thought likely to think that this is a newfangled fad or problem created by the modern spirit and modern age, and the result of modern thought and viewpoint. But he soon learns that the idea of contraception is almost as old as the human race. Apparently nothing is older than contraception, except perhaps conception itself. But we venture to state that one is about as old as the other. It is quite evident that contraception has been practiced in some form for ages, and it seems that the reasons for this practice have always been about the same as they are today. So we are not dealing with anything new. We are simply presenting to you a problem of the ages.

This is an age of organization and the modern birth-control movement is an attempt in an organized way to establish cer-

tain principles and attain certain results that the human being as an individual has struggled with for ages. The recent past has been one of individual action and practice and for individual reasons mostly, but in the minds of many this has now assumed the proportion of a racial problem and the problem now includes the race as a whole as well as that of the individual or the individual family.

The earlier discussions on this subject were mostly from the social and philosophical viewpoint, and concerned the questions of over-population, food supplies, poverty, famine, vice and war. Only a small part of the world was then populated and people were grouped together in small communities. Each community would depend mostly on its surrounding territory for its food supplies. Since transportation was crude the area to which a community could reach for its food supplies was limited. The size to which a community grew depended somewhat on its ability to obtain food. As the community grew, food would be scarce, with resulting hunger and high cost of food, and many times actual famine. Human mortality would be high and especially infant

*Read before the Detroit Academy of Medicine, October, 1934.

†Dr. George Kamperman is a graduate of the University of Michigan, 1907. He was instructor in Obstetrics and Gynecology at the University of Michigan, 1907-1912. He is now attending Obstetrician and Gynecologist to Harper Hospital, Detroit.

mortality. As crowding from over-population occurred, human life depreciated in value and war became a recognized method of reducing population. Over-crowding from excessive population would be associated with unhygienic living and epidemics would result and reduce the masses of the people, and then the community would again be more livable for those that survived. It was always a question of over-population versus food supplies, with war, famine, pestilence and high infant mortality to check the overgrowth of population.

Gradually these checks to over-population have been removed. A variety of factors have contributed to this change. Transportation gradually developed and has now been completely revolutionized, and the community can now reach out all over the world for the markets of its food supply. In this way famine can now to some extent be controlled. If crops fail in one community food can now be supplied from elsewhere. Also the methods of food production have so changed that now the question of feeding over-population is not one of food production or distribution. There is now enough food for all. If hunger exists it is now due to other causes.

Epidemic diseases which formerly so frequently checked the growth of population have been to a great extent conquered by medical science. We no longer hear of huge populations being devastated by pestilence, or whole communities being swept away by infectious disease. Thus medical science has conquered nature's check for over-population. But medical science has done still more. It has reduced infant mortality to such a degree that as a result population is definitely increased. Furthermore the span of life is lengthened so that the human being remains in this world a longer time to swell the masses of population. Thus medical science can be credited with having removed to a large extent the check against over-population that formerly existed.

The other great check to over-population that has always existed, in fact was doubtless used as a remedy against over-population, is war. The nations of the world are striving to get together to abolish war as a method of settling international disputes. If that day ever comes the last major check to over-population will be removed.

In the opinion of many there is no doubt that over-population has been a great factor

in causing war. In the past whenever a country has been over-populated and it required new lands for its people to occupy, it would simply look around for a convenient colony or piece of territory to seize. War was the natural outcome. The action of Japan in seizing part of the mainland of Asia is considered by many a necessary step to furnish an outlet for her over-population.

With all these checks to over-population gradually eliminated it is reasonable to expect that the population of the world will gradually increase. In some countries this is already a handicap, and it is a problem the world may have to consider before very long.

To view the question impartially, one may ask whether all these evils of over-population are as vital today as they appeared to sociologists a century ago. As mentioned before, the worry of over-population at that time was mainly concerning the food supply for the increasing human race. Does that worry exist today, and, particularly, does it exist in this country? It is probably fair to state that the problem of food supply is not the same throughout the world. Japan is at present the best example of over-population in relation to food supply. And in general this is more true of older countries than of those more recently settled. In this country we must admit that at present over-population does not worry us as far as food supplies are concerned. Modern methods of transportation of food-stuffs and intensive methods of production of food-stuffs make it possible to feed an enormous population. If there is hunger in this country it is not because of scarcity of food. It is more likely due to a defect in our social-industrial system in that not sufficient employment can be offered so that the masses can earn enough to purchase from the large food stores at hand. In an industrial nation a continued steady industry is essential and we may ask whether this country is over-populated from that standpoint. In a sense we admit we do have a population problem in this country when we pass immigration laws to discourage immigration. There was a time when we welcomed growth of population. But apparently we are beginning to feel that we can no longer absorb the increases resulting from immigration.

Besides these sociologic and philosophic reasons for limiting of population other rea-

sons are suggested. Thus far we have discussed only considerations that may affect the human race as a whole. There are definite reasons why individuals and families practice contraception. These are usually classified as medical, economic, and social. The medical profession knows that certain women cannot bear children with the same safety that normal healthy individuals can. The list of diseases which make pregnancy and childbearing an increased hazard need not be given here. The medical profession has been slow even in the face of such indications to adopt a definite scheme of prophylaxis. We have been very vague in the advice we have given such patients and too often we have later resorted to interruption of pregnancy in such patients in order to avoid jeopardizing the patient's health or to prevent the loss of life. Furthermore the medical profession sees patients in whom no definite disease can be demonstrated, yet are so run down by pregnancies in quick succession that their health is definitely threatened. In such patients there are no recognized indications for therapeutic abortion. Yet, it is not to be denied that an additional pregnancy is at times a very undesirable event from the standpoint of the patient's health. In cases presenting these medical contraindications to pregnancy it does seem as if the medical profession should recognize the propriety of advocating a definite system of contraception. And something can likewise be said from the standpoint of the offspring. The future of the offspring can be materially affected by maternal disease. Since choice of birth is not voluntary with a child it should at least have the right to be born with a sound body and mind. Syphilologists agree that conception should not occur during the active stage of syphilis. Certain psychiatric conditions are likewise a handicap for a child. In all fairness to the child as well as to society at large we feel that patients with psychiatric conditions should not reproduce their kind.

It may be inserted parenthetically that birth control, although its objectives in a way parallel the aims of sterilization, only partially reaches that same goal. Sterilization can prevent the breeding of the unfit; while birth control aims to do the same, it is hindered by the fact that among the very unfit and irresponsible there is no conscious feeling that prevention is essential.

From the eugenic standpoint each has its place. Among the extremely mentally unfit, birth control fails in its aims because no necessity is recognized. However, among those mildly mentally unfit contraception has given very satisfactory results. In such, contraception offers a great deal of hope, since sterilization, because of public opinion, can only be resorted to in the very grave forms of unfitness.

From the individualistic standpoint the economic situation is often used as a reason for limiting the offspring. Under this classification perhaps can be placed the greatest number of families who of their own accord are using some means of contraception. Many a couple are married at a stage of their economic life when the rearing of a family would work great hardship, and the rearing of the child to the standard of the age may seem a hopeless proposition. The fact is that our standards of living are high, be this right or wrong. To bring up a child as modern standards demand seems a big problem to many parents. The present economic situation is a good illustration of the point. In many families the economic situation is such that the question of proper obstetrical care is a problem and the care of an additional child on the limited income creates almost hopeless despair. Among the indigent this is an important problem and adds considerable to the welfare budget of the community. As obstetricians we are constantly listening to the unhappy tale of those patients. What can we propose as a solution? Should we advise them not to marry so early in life? Should marriage depend on the accumulation of a financial reserve? Many social thinkers believe early marriages are desirable in that it probably is a factor in reducing extra-marital sex relations. In fact early marriages are often advised as a solution for the prostitution evil. Francis Place, in 1822, wrote that he virtually owed his moral salvation to a very youthful marriage, but that this same marriage had burdened him with fifteen children and filled his early years with the hardest poverty. He concluded that the only solution to the poor man's population and moral problem was early marriage and limitation of family.

Another factor to be mentioned in connection with the economic reasons for contraception is the question of abortion. It seems as if the practice of abortion is flour-

ishing right now. We have all had patients who presented themselves in great despair because of a suspected pregnancy, and we have seen them return at a later date overjoyed in that they had been able to procure an abortion. As obstetricians we recognize that this is not fancy or theory, but a real situation. The unwanted pregnancy is the cause of the abortion evil. The intelligent recommendation of an efficient contraceptive method will do a great deal towards solving the abortion problem and prevent the high mortality and morbidity accompanying it.

The third group of indications often given as the reason for the use of contraception is the social indication. This group may overlap to some extent that group in which contraception may be advised for economic reasons. But in general this indication does not necessarily deal with family health or economics. There are some families where fertility is so great that pregnancies occur in rapid succession. Such a patient often requests that she be given the right to regulate her childbearing and space her pregnancies at will at more or less definite intervals. By so doing she feels she can concentrate her attention on one child up to a certain point before the next one demands a repetition of her service. As mentioned before, our standards of living are high and it is becoming more and more difficult to rear a large family. There is a great deal of justice in the patient's assertion that she prefers to bring up a smaller family to a higher standard, rather than a larger family to a lesser standard.

The increasing higher standard of living has made it more and more difficult to raise large families. The right of womanhood to assert itself has been gradually recognized. Women have won the right to enter many new fields of endeavor and their ability to compete with men cannot be questioned. This competition by women in all lines of work is occasionally a matter of choice but more often it is forced by the economic situation. Woman has gradually asserted and won her independence, and among other things she is now demanding that motherhood be voluntary, and she asserts the right to control her own sex life. If motherhood can be controlled so as to fit in with her manner of living she demands the right to do so. Woman has been the patient bearer of heavy maternal burdens for generations,

but she now demands the right to regulate to some extent the weight of this burden.

We may here ask parenthetically as to the cause of this apparently new attitude. Let us remember that birth control from the individual standpoint is not new. It is probably as old as the human race. Why, then, all this discussion about it? We might say that this is simply the way the modern age approaches all questions. The former secrecy and hypocrisy is replaced by frankness and candor. The modern age faces the question as it is, faces the facts in the open, and is frank about discussing these problems. This is reflected in all of our activities, as demonstrated by our literature, drama, and painting. The ideas are not new, but the frankness with which these things are discussed gives the impression that a huge change has taken place. Whereas formerly birth control was a secret with the individual, now it has become a topic for public discussion.

At the onset of this discussion we emphasized the fact that this problem had been under consideration in various phases for a matter of centuries. It may be interesting to see how attitudes and standards have changed.

One cannot make a complete record of early historic data about contraception without including the celebrated case of a Mr. Onan who according to early Hebrew law was obliged to rear offspring for his departed brother. It is recorded that although he took his brother's widow to wife he refused to produce offspring, and spilled his seed upon the ground. This case is remarkable in that it is the one case on record where the death penalty was inflicted for contraception. For this offense he was slain by the Almighty. It would seem that since then the Almighty has become more merciful in his judgments. If the death penalty was still inflicted for the practice of contraception, it would rival all other methods of reducing over-population.

Both Plato and Aristotle saw a great menace in over-population. Both advised limiting the period of procreation for both men and women. Plato suggested that women should bear children for the state only between the ages of twenty and forty. Aristotle suggested a somewhat earlier marriage age. If a child was conceived before or after this period it was "to be considered in the same criminal and profane light" as

if "it had been produced without the nuptial ceremonies, and instigated solely by incontinence." Neither seemed to frown on extramarital sex relations, as long as offspring were not produced. In fact Plato's philosophy allowed a great latitude of freedom between the sexes outside of the ages for legal procreation, but accompanied this permission with strict orders to "prevent any embryo which might come into being from seeing the light." Aristotle feared that even by limiting the years of procreation population might increase too fast and he proposed that the number of children allowed to each marriage should be regulated. To insure this he suggested that in case of pregnancy after a woman had had the allowed number of children, an abortion should be procured before the fetus had life. Plato sensed that in limiting population we should insure the procreation of the best human stock. To accomplish this end he proposed "that the most excellent of the men be joined in marriage to the most excellent among the women, and that the offspring should be brought up for the state. The inferior citizens should be mated with the inferior females and the offspring "should not be allowed to come to light, or should be buried in some obscure and unknown place."

In 1798 Malthus published his now famous essay on "Principles of Population." His argument was entirely philosophic and concerned population and food supply. He believed that population increased by geometrical ratio, while food supply increased only by arithmetical ratio. His statistics attempted to show that population in some countries doubled once in about twenty years. He had visions that all cultivatable land would soon be occupied and there would be no more lands to which excess population could emigrate. Malthus analyzed conditions in each country and pointed out checks to growth of population in each community. He maintained that nature's checks resulted in survival of the most resistant, and it is probable that Darwin conceived his idea of the survival of the fittest from Malthus. His conclusion was that increase in population should be checked and to accomplish this he advocated self-restraint and sex suppression. This is a far cry from the infanticide and feticide proposed by Plato and Aristotle. It shows how the ethical standard of the world had changed in a number of centuries.

This principle, known as the Malthusian principle, was followed up by several other thinkers and writers, notably James Mill, John Stuart Mill, Francis Place, who wrote his "Illustrations and Proofs of the Principles of Population" in 1822, Richard Carlile, who wrote "Every Woman's Boofl," and Robert Dale Owen, who wrote "Moral Physiology." These men in a way were the originators of our present Birth Control Movement in that they departed from the Malthusian idea of sex suppression and restraint and began to advocate definite schemes for contraception. To this group the term Neo-Malthusian was applied. The Malthusian principle was to them too idealistic to be of any practical value. It required abstinence in sex relations to check the rising numbers of population and its practical solution meant late marriage. Men like Place, Carlile and Owen were free thinkers searching for truth and outspoken for the cause of truth. They were among the first to proclaim publicly their belief that the exercise of sex function was more than a reproductive act. In speaking of the reproductive instinct as serving another purpose than reproduction, Owen says, "It is justifiable just in as far as it makes the human a better and happier being." He states "he cannot feel the most social and kindly of human instinct is degrading in itself. Its mortification is michievous (though less injurious than its excesses). It almost always freezes and stiffens the character by checking the flow of its kindest emotions; and not infrequently gives it a solitary, antisocial, selfish stamp."

This idea is very fundamental as it is the real basis for contraception. If the sex act was indulged in only for reproduction, then the question of contraception would never arise. The fact is that the human being indulges in the sex act for other motives than reproduction and this has led to the practice of contraception.

This group of men felt that the Malthusian principle was not only conducive of a great deal of mischief, since it advised abstinence, but it was impracticable for the world. To quote again from Owen: "Now Mr. Malthus may preach forever on this subject. Individuals may be indeed found, who will look to distant consequences, and sacrifice present enjoyment; even as individuals are found to become and remain Shaking Quakers; but to believe that the

mass of mankind will abjure, through the fairest years of life, the nearest and dearest of social relations, and during the very holiday of existence will live the life of monks and nuns, all to avert a catastrophe which is some hundreds of years distant, to believe this requires a faith which no accurate observer of mankind possesses." Owen agreed with Malthus that population should be restrained, and that its only natural restraints were vice and misery, but he ridiculed the idea that the only remedy suggested had been late marriages. He felt the principle of Malthus was fraught with immorality.

These men of the Neo-Malthusian group were aware of the criticism their ideas would bring, but they had courage to declare what they thought was truth. In 1826 Carlile in England had written a pamphlet which had created a great stir. His legal trial because of this publication had caused a great deal of discussion. This pamphlet shocked even the sensibilities of men who were kindly inclined to the idea because of its coarseness and brutal method of expression. Robert Dale Owen thought the cause had been injured by Carlile's writing, and he wrote his pamphlet partially to counteract Carlile's mischief. In his preface he writes: "Now no one more admires than I do the courage which induced that bold advocate of heresy to broach this important subject; and to him be the praise accorded, that he was the first to venture it. But the manner of his book I do not admire. There is in it that which was repulsive (I will not say revolting) to my feelings on the first perusal—I cannot doubt that a similar, and even a more unfavorable impression will be made on the mind of others, and thus the interests of truth will be jeopardized. Then again I think the physiological portion of his pamphlet somewhat incorrect as to facts—It may seem vanity to me to imagine that this treatise is free from similar objections."

Owen establishes, social, economic and medical reasons for contraception. His arguments would be considered modern today. He even goes so far as to discuss the question of contraception for the unmarried. Because of the antisocial attitude towards the unfortunate but otherwise decent unmarried girl he declares, "If we cannot persuade society to revoke its unmanly and unchristian persecution of those who are often the best and gentlest of its members, let us at least give to woman what

defense we may against its violence."

Robert Dale Owen published his pamphlet in 1830. His discussion of the physiology of conception is rather remarkable in that he brushes aside all theories as to how conception does occur, and states positively that it is well known that for conception to occur the sperm must enter the uterus, and that contraception would mean simply the prevention of this. Remember the fact that Robert Dale Owen was a layman. We mention this fact as being remarkable in that the next pamphlet published on this subject three years later, by a medical man, is rather hesitant about the physiology of conception.

Robert Dale Owen recommended only one method of contraception, that is withdrawal before emission, coitus interruptus. He cited as an objection to this that it left contraception entirely in the hands of the man. He cites his impression that in France no high minded man would willfully impregnate a woman unless he knew her to be desirous of having offspring.

The most noteworthy contribution to support the Neo-Malthusian idea came from the pen of a physician, Dr. Charles Knowlton of Massachusetts, in 1833. It was the first writing on the subject by a medical man. Prior to this all writings had come from men socially and philosophically inclined. These men had looked upon the problem as a race or population problem. From now on would be considered the personal or family viewpoint, as well as the general racial problem. Dr. Knowlton's pamphlet, entitled "Fruits of Philosophy," was destined to play an important rôle in the development of the Birth Control Problem. This pamphlet had a distinct medical flavor, and besides discussing the reasons for contraception gave a description of the female genital organs, a discussion of the physiology of menstruation, theories as to how conception occurred, sterility and impotency. We must remember that this pamphlet was not intended for medical men, but for the laity. His excuse for the pamphlet was revealed in the fact that he proclaimed the idea that a frank discussion of truths was always proper. He believed that truth in all its forms was to be searched after. He argued that a moderate exercise of the sex function was part of a normal life and argued that all organs including the sex organs should be exercised to attain optimum general health.

When we consider that this pamphlet was intended for the laity it is rather interesting to note some of its medical contents. In discussing sterility, irregular menses, impotence and frigidity, he suggests certain remedies. For irregular menses he suggests iron filings and anvil scales steeped in wine or cider. For painful menses he suggests Tincture Guaiac. For impotency in the male which he thinks is analagous to frigidity in the female he suggests cayenne and Spanish Fly. He also suggests that in sterility the semen should be examined.

Dr. Knowlton recommended four definite contraceptive procedures. As the most simple he suggested withdrawal before emission, coitus interruptus. In his discussion he does not have the modern psychiatrist's idea that this is not a good practice. His discussion is also interesting in that it reveals opinions held as to physiology of conception. They were not positive as yet how conception occurred. He notes that a veterinarian had observed that severing the fallopian tube was followed by sterility. It was thought that in some way the semen was absorbed by the vaginal mucosa, and carried by the blood stream to the uterus. In support of some such idea he cited cases of pregnancy occurring where the hymen had not been penetrated. His second recommendation for contraception was the use of a "baudruche" or sheath. His third was the advice to use a sponge for insertion into the vagina, but he added that he felt this was not a sure preventative. His other method, and which he recommended in rather glowing terms as far as efficacy was concerned, was the use of a vaginal spray. For this he suggested various solutions such as zinc sulphate solution, alum solution, a solution of pearl ash, and an infusion of oak bark. He cited as an objection that the woman would have to leave her bed for a few moments, but he added "no check was entirely devoid of objections." Apparently he had some misgivings of the efficacy of this method, although he recommends it in glowing terms, for in writing about the vaginal spray he says he hesitated to publish it as then he did not know it would never fail, and feared it might fail if he recommended it. To quote him: "I hope that no failure will be charged to inefficacy of this check which ought to be attributed to negligence and insufficient use of it. I will, therefore, recommend at least two applica-

tions of the syringe, the sooner the surer, yet it is my opinion that five minutes delay would not prove mischievous, perhaps not ten."

This little sixty-page pamphlet of Dr. Knowlton was forty years later reprinted in England. In the meantime laws had been passed here and in England classifying writings about contraception as obscene. To test the validity of the law in England Charles Bradlough and Annie Besant, leaders of the free-thought movement, decided to reprint the pamphlet. Notice was given in advance that this was to be done to test the validity of the law. The defendants were found guilty but the verdict was set aside on technical grounds. This gave such publicity to Neo-Malthusianism that interest in it grew by leaps and bounds. During six weeks of trial the number of pamphlets sold was far in excess of what had been sold the previous forty years.

The next important writing was a book, entitled "Elements of Social Science," by Dr. George Drysdale, published in England in 1854. Very curiously, the author withheld his name from the book, on the ground that publicity might be annoying or embarrassing to his family. In this book he makes a plea for more study of the human body and makes the assertion that no human body has served its complete usefulness if it is not offered for dissection after death. He dissertates considerably on the idea that in the past too much attention had been paid to souls, and not enough to the body of the human being. He scores the mystery and lack of knowledge in connection with sex matters and reproduction. He discusses in great length the importance of sex in human life. He asserted that a moderate sex gratification was a stimulant to mind and body and he argued that abstinence was not only unnatural and unhealthy, but a sin against the human body. He felt that certain diseases were definitely due to sex suppression and among these he listed chlorosis and hysteria on the part of the female, and spermatorrhea on part of the male. As one reads the text one feels that in a way he is a forerunner of Freud. As a cure for these ailments due to sex suppression he advises marriage, or at least sex indulgence. For the unmarried he defends prostitution. He discusses our social conventions and asserts that "a convention that interferes with natural exercise is wrong." One wishing to

inform himself on history and regulation of prostitution can find no better discussion than his chapter on this subject. As a defense for prostitution he lists the evils of self abuse. For the married he follows Knowlton in his list of contraceptives, but adds something about the "Safe Period." He thought there was a definite period of the month when conception was unlikely, and he placed this period at the mid-portion of the intermenstrual time.

Our present laws excluding contraceptive information from the mails are the direct result of the antagonism that arose to the principle of Neo-Malthusianism. The name of Anthony Comstock is connected with this legislation. In 1869 he secured the passage of a law in New York State which declared contraceptive information as obscene. In 1873 through Comstock's efforts congress enacted a statute declaring such information as illegal and obscene, and excluded it from the United States mail. That federal law still stands. The American people have learned since then that it is easier to enact legislation than to repeal it. One of the activities of the American Birth Control League is its attempt to secure repeal of this antiquated legislation.

The American people have also learned that a government cannot make a people moral by legislation. Some of the statutes enacted have been so ridiculous and so impossible to enforce that it seems they were placed there simply to be forgotten. For instance Rhode Island has a law which makes the use of a contraceptive a prison offense. However, no one has ever been imprisoned under this law. This law has never been repealed.

In 1918 Judge Crane of the New York Court of Appeals decided that the legally practicing physician can legally give contraceptive advice for the protection of health and the prevention of disease.

About one-half of the states in this country mention prevention of conception in their laws in some guise or other. The Michigan law is as follows:

"The publication or sale within this State of any circular, pamphlet or book containing recipes or prescriptions in indecent or obscene language for the cure of chronic female complaints or private diseases, or recipe or prescription for drops, pills, tinctures, or other compounds designed to prevent conception, or tending to produce miscarriage or abortion is hereby prohibited and for each copy thereof so published and sold, containing such prohibited recipes or prescriptions, the publisher and seller shall each be deemed guilty of a misdemeanor and

shall be liable to same penalties for a violation of preceding section."

This is interpreted as intending to prohibit the publishing and distribution of information on prevention of conception. It does not prohibit publishing a discussion on the subject of birth control, and it does not prohibit the giving of verbal information or advice on prevention of conception. Thus the giving of contraceptive advice is legal in this State as long as the advice is given verbally.

In spite of the fact that contraception has been a subject of dispute for so long a time, it has been only during the last two decades that the movement has developed into an organization. Margaret Sanger, a visiting nurse in East Side slums of New York City, began her work for this idea in about 1912. She was the organizer of the American Birth Control League. She and her associates have been arrested numerous times and have served several prison sentences. The work is receiving support from all ranks of society. The laity are becoming well acquainted with the problem. It is being endorsed by various civic-minded groups of people. A great many of the clergy give their support to the idea. Various churches in their council meetings are discussing it and some have accepted the idea.

Organized clinic work in contraception began in Europe long before it was thought of in this country. The first Birth Control Clinic in the world was opened in Amsterdam, Holland, in 1878. This Clinic was opened by Dr. Aletta Jacobs, and three years later, in 1881, the Neo-Malthusian League of Holland began a campaign of publicity among the poor of Holland.

Because of the demand created for birth control advice, and because the stimulus for this demand had come mostly from laymen, the New York Obstetric Society in 1912 determined to include the birth control problem as a part of its program of study and investigation. This study was made independently from that of any other organization. In fact a definite point was made that the study was not part of a propaganda, but rather a study as to methods of contraception. Dr. R. L. Dickenson was secretary of the committee which outlined the research work. As mentioned previously, contraceptive methods had been taught in clinics in Holland since 1878, but this study furnished the scientific basis for the present contraceptive methods. By a system of

follow-up work the efficacy of the different methods of contraception was studied, and because of this study a definite method of contraception can be taught with confidence of fairly successful results.

Margaret Sanger and her associates persisted in their propaganda and in spite of legal entanglements succeeded in establishing and maintaining clinics. Although laws concerning contraceptives have really not changed, yet because of court decisions attempts at enforcement seem to have weakened. During this time a great many influential citizens other than birth control enthusiasts began endorsing the idea. Many editors discussed the problem in editorials and in great numbers gave it their support. Notable among these was Mencken. Havelock Ellis in his "Psychology of Sex" gave his stamp of approval. Sociologists and economists almost as a group supported the idea. The various churches have discussed the matter, and prominent clergy have endorsed the idea. The idea is, however, far from universal acceptance. Because of religious reasons and moral implications it will probably always be a controversial subject. Medical men in general have stood rather aloof. Certain prominent men have publicly endorsed the idea. In 1912 Dr. Abraham Jacobi in his presidential address to the American Medical Association endorses hygienic prevention of pregnancy. In 1924, Dr. William Pussey, president of the American Medical Association, also urged the necessity of contraceptive work and study. In 1933, Dr. Barton Cooke Hirst, then chairman of the Section on Obstetrics, Gynecology and Abdominal Surgery of the American Medical Association, listed birth control as one of the four major gynecologic problems. The list of sponsors for the National Birth Control Societies is practically a catalogue of all the heads of obstetrics and gynecology in our most prominent medical schools. But the profession at large is aloof to the idea.

In trying to analyze as to why the medical profession takes so indifferent a stand it would seem that it is partially due to the fact that the medical profession never cares to be drawn into any action by propaganda. A great many medical men refuse to endorse an emotional or hysterical movement. The demand for contraceptive advice has originated with the laity and medical men have been hesitant to supply the demand not

because of disbelief in the idea. Many feel that the Birth Control movement has been somewhat unfortunate in its sponsors. The result is that medical men are often lukewarm, if not definitely antagonistic. The fact is that the birth control movement has developed without much aid from medical men. Another reason for the aloofness of the medical man is probably that the Birth Control movement suggests to him the idea of more clinics. It is true that various lay organizations undertake the organization of clinics as their chief function, and the organization of clinics does not receive much enthusiastic response from medical men.

The medical men may well take the stand that Birth Control is a medical problem and it does not make much difference whether medical men in an organized way endorse such a movement. This question of endorsement has been made too much of an issue. It goes without question that the various Birth Control Associations would greatly desire a public endorsement by organized medicine. But it almost appears that too much of an issue has been made of public endorsement.

One cannot deny that the demand for contraceptive measures has been created. The birth control enthusiasts can be given credit for this fact. The laity seems to have become birth-control minded. The demand having been created, the laity will demand advice. It does seem as if this advice should come from the patient's personal physician. Commercial firms have taken advantage of the physician's aloofness and have advertised directly to the patient. The medical man can still decide whether this will be treated as a medical problem or whether by default it will become the patronage of drug shops or other commercial firms. The medical practitioner can control this if he will inform himself and give his patient the benefit of the researches in this field.

1807 David Whitney Building

References

- Aristotle: *Aristotelis Opera: The Republic*, Book VII.
- Carlie, Richard: *Every Woman's Book*.
- Dickenson, Robert Latou: *Medical Analysis of a Thousand Marriages*.
- Drysdale, Dr. George: *The Elements of Social Science*.
- Knowlton, Dr. Charles: *Fruits of Philosophy*.
- Malthus, Thomas Robert: *Essay on the "Principles of Population"*.
- Mill, James: *Elements of Political Economy*.
- Mill, John Stuart: *Principles of Political Economy*, with *Some of Their Applications to Social Philosophy*.
- Owen, Robert Dale: *Moral Physiology*.
- Place, Francis: *Illustrations and Proofs of the Principles of Population*.
- Plato: *The Republic*, Book V.
- Robinson, Caroline Hadley: *Seventy Birth Control Clinics*.
- Ussher, R.: *Neo-Mathusianism*.

CANCER SURVEY OF MICHIGAN*

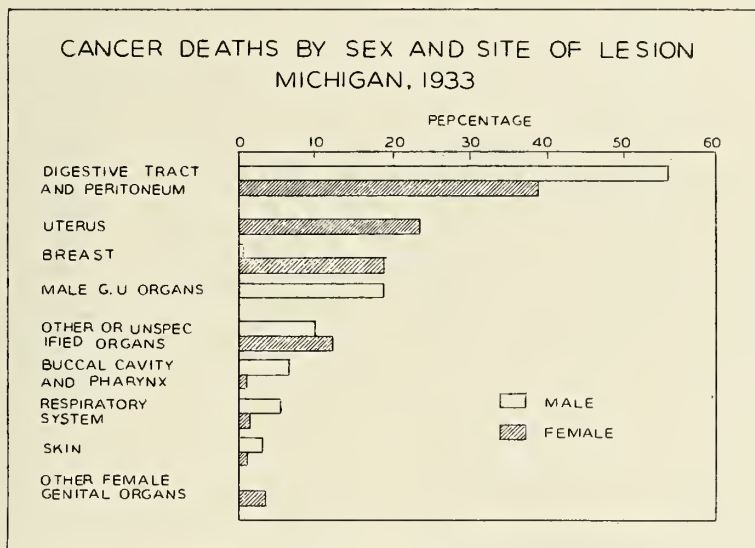
Made by
FRANK LESLIE RECTOR, M.D.†

Analysis of statistics of the twenty leading causes of death in Michigan in 1933 shows that cancer was exceeded only by heart disease. Cancer caused 12.5 per cent of deaths due to the twenty leading causes of death, and the number of deaths due to cancer was more than double those from tuberculosis. Cancer caused 10 per cent of all deaths in Michigan in 1933. There was a cancer death in this State at intervals of one hour and forty-seven minutes during that year.

Table XVII lists the deaths from reportable diseases in Michigan during the five-year period 1929-1933, inclusive. During this period the number of cancer deaths each year was from 4.2 per cent to 56.8 per cent greater than for the combined deaths from the reportable diseases. For the five-year period, cancer deaths exceeded deaths from reportable diseases by 33 per cent.

TABLE XVI. TWENTY LEADING CAUSES OF
DEATH IN MICHIGAN
1933

Cause	Number deaths
Organic heart disease.....	9,257
CANCER	4,890
Apoplexy	3,878
Nephritis	3,008
Pneumonia	2,756
Tuberculosis	2,348
Accidents (except automobile).....	2,045
Premature birth	1,364
Automobile accidents	1,259
Diabetes	1,103
Diseases of coronary arteries.....	1,009
Arteriosclerosis	966
Influenza	856
Suicide	816
Angina pectoris	773
Appendicitis	771
Congenital malformations	575
Senility	487
Puerperal causes	447
Cirrhosis of liver.....	354
TOTAL.....	38,962



In Table XVIII will be found similar information for Detroit. In this city, however, the number of deaths from the six reportable diseases listed each year exceeded the number of deaths from cancer, although cancer deaths are rapidly overtaking deaths

from reportable diseases. This is true not because cancer deaths in Detroit have increased so much, but the number of deaths from reportable diseases is decreasing.

While in some instances the major activities of official health agencies may now lie in the fields of maternity, infancy and child hygiene, and venereal disease, they still have

*Continued from December, 1935, issue.

†Field Representative, American Society for the Control of Cancer, New York, N. Y., Clarence Cook Little, Sc.D., Managing Director.

CANCER SURVEY OF MICHIGAN—RECTOR

TABLE XVII. DEATHS FROM REPORTABLE DISEASES AND CANCER
Michigan, 1929-1933

Disease	1929	1930	1931	1932	1933	Total Five Years
Diphtheria.....	498	299	172	106	112	1,187
Measles.....	146	231	28	183	111	699
Scarlet fever.....	145	130	122	112	157	666
Tuberculosis (all forms).....	3,140	2,912	2,660	2,463	2,348	13,523
Typhoid fever.....	81	87	75	56	50	349
Whooping cough.....	255	176	190	199	153	973
TOTAL.....	4,265	3,835	3,247	3,119	2,931	17,397
CANCER.....	4,446	4,420	4,610	4,771	4,890	23,137
Excess cancer deaths.....	4.2%	15.2%	42%	53%	66.8%	33%

TABLE XVIII. DEATHS FROM REPORTABLE DISEASES AND CANCER
Detroit, 1929-1933

Disease	1929	1930	1931	1932	1933	Total Five Years
Diphtheria.....	316	174	98	65	51	704
Measles.....	29	118	2	45	50	244
Scarlet fever.....	54	57	30	42	37	220
Tuberculosis (all forms).....	1,326	1,314	1,129	1,054	990	5,813
Typhoid fever.....	13	16	10	10	9	58
Whooping cough.....	88	46	64	74	43	315
TOTAL.....	1,826	1,725	1,333	1,290	1,180	7,354
CANCER.....	1,126	1,139	1,137	1,198	1,130	5,720

a profound responsibility toward prevention and control of communicable diseases. In the majority of cases this need was the reason for creation of official health agencies, and other duties were added as communicable diseases became better controlled. From Table XVII it is noted that during the past five years deaths from cancer average well up with combined deaths from all reportable diseases in Michigan. Occurrence of a comparatively few cases of any of these diseases at once sets in motion all the power and authority of health departments for their control. The help of state and national organizations is enlisted, and, if necessary, emergency funds are requested with which to hold the disease in check. For example, the intense activity of official health agencies in the face of epidemics of poliomyelitis and encephalitis, in which there may be a few hundred cases with a few score deaths, only serves to bring out in marked contrast the lack of interest of such agencies in the cancer problem which regularly takes a much greater toll of life and physical incapacity throughout the jurisdictions of all health departments.

This statement is made, not in criticism

of activities directed effectively toward the control of common epidemic diseases which would cause much suffering and some loss of life, if they assumed epidemic proportions, but rather to emphasize the importance of cancer as a lethal disease and as a heavy drain on the social and economic life of the community. The effective control of communicable diseases by the official health agencies in Michigan is attested by the small number of deaths from these diseases listed in Table XVII. The feeling of hopelessness about cancer which has so long pervaded all classes of society doubtless has had more to do with the neglect of this question by official health agencies than has the indifference and lack of interest of such organizations and their responsible officers.

The contribution which official health agencies can make toward the control of cancer rests on their ability to bring to the public known facts about the preventability and curability of the disease. The significance of conditions now recognized as pre-cancerous and the importance of early signs and symptoms might well be stressed in health department publications and in official utterances by their personnel.

CANCER SURVEY OF MICHIGAN—RECTOR

TABLE XIX. POPULATION, CANCER DEATHS, NUMBER LICENSED PHYSICIANS BY COUNTIES
Michigan, 1933

County	Estimated Popu- lation 1933	Num- ber Cancer Deaths 1933	Esti- mated Num- ber Living Cases 1933	Num- ber Li- censed Phy- sicians 1931	County	Estimated Popu- lation 1933	Num- ber Cancer Deaths 1933	Esti- mated Num- ber Living Cases 1933	Num- ber Li- censed Phy- sicians 1931
*Alcona	4,989	7	21	1	*Lapeer	28,348	38	114	23
*Alger	9,327	12	36	2	*Leelanau	8,206	10	30	5
*Allegan	38,974	47	141	30	*Lenawee	50,085	82	246	51
*Alpena	18,808	19	57	12	*Livingston	19,274	18	54	14
*Antrim	9,979	19	57	6	*Luce	6,528	3	9	9
*Arenac	8,007	6	18	7	*Mackinac	8,783	13	39	2
*Baraga	9,168	11	33	3	*Macomb	78,049	52	156	59
*Barry	20,928	41	123	18	*Manistee	17,409	19	57	19
*Bay	69,474	76	228	61	*Marquette	44,487	37	111	31
*Benzie	6,587	15	45	5	*Mason	18,756	30	90	15
*Berrien	82,606	102	306	80	*Mecosta	15,738	26	78	11
*Branch	23,950	35	105	25	*Menominee	23,932	27	81	15
*Calhoun	88,370	93	279	77	*Midland	19,150	18	54	12
*Cass	20,888	26	78	18	*Missaukee	6,992	6	18	4
*Charlevoix	11,981	13	39	10	*Monroe	53,775	40	120	37
*Cheboygan	11,502	12	36	7	*Montcalm	27,471	35	105	25
*Chippewa	25,392	27	81	19	*Montmorency	2,814	2	6	3
*Clare	7,032	5	15	6	*Muskegon	92,956	85	255	68
*Clinton	25,174	32	96	20	*Newaygo	17,029	28	84	11
*Crawford	3,097	4	12	2	*Oakland	224,164	150	450	165
*Delta	32,556	39	117	23	*Oceana	13,805	15	45	11
*Dickinson	30,689	23	69	18	*Ogemaw	6,595	4	12	6
*Eaton	31,728	49	147	28	*Ontonagon	11,114	9	27	7
*Emmet	15,109	32	96	10	*Osceola	12,806	13	39	11
*Genesee	224,349	141	423	155	*Oscoda	1,728	3	9	1
*Gladwin	7,424	4	12	5	*Otsego	5,554	7	21	5
*Gogebic	31,577	36	108	24	*Ottawa	55,312	62	186	40
*Grand Traverse	20,372	32	96	18	*Presque Isle	11,330	5	15	8
*Gratiot	30,252	38	114	22	*Roscommon	2,055	2	6	2
*Hillsdale	27,417	33	99	28	*Saginaw	124,002	156	468	94
*Houghton	52,851	70	210	38	*Sanilac	27,751	25	75	19
*Huron	31,132	45	135	16	*Schoolcraft	8,451	8	24	4
*Ingham	120,890	119	357	134	*Shiawassee	39,921	42	126	34
*Ionia	35,093	31	93	31	*St. Clair	68,702	69	207	66
*Iosco	7,517	7	21	6	*St. Joseph	30,618	33	99	26
*Iron	20,805	28	84	10	*Tuscola	32,934	56	168	31
*Isabella	21,126	26	78	16	*Van Buren	32,637	53	159	27
*Jackson	93,717	102	306	96	*Washtenaw	67,743	202	606	110
*Kalamazoo	92,382	121	363	96	*Wayne	2,062,527	1,498	4,494	2,158
*Kalkaska	3,799	3	9	3	*Wexford	16,827	16	48	14
*Kent	246,119	301	903	277					
*Keweenaw	5,076	5	15	5					
*Lake	4,066	6	18	4					
					Total	5,093,000	4,890	14,670	4,725

*Counties without hospitals of 25 beds or more.

Measures so far developed for controlling cancer equal in no degree those found effective against the common communicable diseases. The unknown etiology of cancer furnishes the major reason for this lack of control, although enough is now known about the hopefulness of early and adequate treatment to make it unnecessary to wait for more specific information as to etiology before making an effective contribution to a control program. The cancer problem has not yet been dramatized sufficiently to bring it to the attention of the community and to arouse much sentimental appeal in the public mind. Nevertheless, there should be a

strong public appeal in behalf of cancer sufferers, regardless of their age, in addition to the weighty economic problems involved. Cancer of bone is found primarily in children and is usually of a painful and fatal type, at best resulting in amputation with permanent disability. In adults cancer too often strikes at the most productive period of life, when physical and mental efficiency are at their peak. No age is immune, and suffering from this disease, especially in its later stages, is so appalling that practical measures for its control should merit the sympathetic coöperation of all classes of society.

TABLE XX. BED CAPACITY, PATIENTS, DEATHS, AND AUTOPSIES IN CERTAIN MICHIGAN HOSPITALS
1933

Hospital	City	Bed Capacity		Patients		Deaths			Autopsies	
		Total	Cancer	Total Number	Cancer	Per Cent All Admissions	Per Cent Cancer	Total	Per Cent Admissions	Per Cent Cancer Deaths
Enma L. Bixby	Adrian	33	0	710	No data	7.0	No	0	...	...
*James W. Sheldon	Albion	50	0	453	15	5.7	5	9	34.0	60.0
*St. Joseph's Mercy	Ann Arbor	115	0	1,811	36	4.1	10	28	37.0	60.0
*University	Ann Arbor	1,285	0	21,243	825	3.9	109	349	54.0	50.0
Hubbard Memorial	Bad Axe	28	0	370	9	2.4	3	0	...	...
X *Battle Creek Sanitarium	Battle Creek	1,000	0	4,010	43	1.0	7	7	25.0	57.0
*Leila Y. Post Montgomery	Battle Creek	175	0	2,090	53	2.5	8	34	38.0	85.0
*Nichols Memorial	Battle Creek	71	0	2,121	21	1.0	4	13	12.0	50.0
Bay City General	Bay City	25	0	675	12	1.8	8	3	8.5	12.5
Bay City Samaritan	Bay City	45	0	1,045	50	4.8	0	6	14.0	...
X *Mercy	Bay City	145	0	1,562	29	1.2	4	28	26.6	75.0
*Mercy	Cadillac	50	0	865	12	1.4	1	5	...	...
*Charles Godwin Jennings	Detroit	66	0	732	22	3.0	6	20	20.0	50.0
**Delray	Detroit	95	0	1,236	22	1.8	3	0	...	...
*East Side General	Detroit	65	0	1,000	15	1.5	5	2	4.2	...
X *Evangelical Deaconess	Detroit	115	0	1,444	24	1.6	5	17	19.3	80.0
X *Grace	Detroit	473	0	6,559	211	3.2	38	127	34.3	42.0
*Grosse Pointe Cottage	Detroit	45	0	943	19	2.0	3	6	13.3	...
*Grosse Pointe	Detroit	35	0	359	1	...	0	1	15.0	...
X *Harper	Detroit	650	0	11,240	626	5.6	60	82	20.4	25.0
X *Henry Ford	Detroit	560	0	5,602	125	2.2	58	117	45.3	25.8
*Jefferson Cl. and Diag.	Detroit	60	0	763	26	3.4	5	2	5.0	...
X *Providence	Detroit	299	0	5,731	81	1.4	14	95	33.1	71.4
X *Receiving	Detroit	650	0	20,750	261	1.2	131	612	26.7	55.7
X *St. Joseph's Mercy	Detroit	175	0	1,773	26	1.5	3	14	18.1	...
X *St. Mary's	Detroit	257	0	3,661	11	1.1	11	32	20.5	...
*Woman's	Detroit	220	0	3,492	96	2.7	19	32	32.3	11.0
Lee Memorial	Dowagiac	32	0	200	11	5.5	2	4	14.0	...
X *Dr. W. J. Seymour	Eloise	700	0	17,795	292	1.6	92	383	33.3	33.6
St. Francis	Escanaba	100	0	1,104	12	1.0	8	2	3.4	12.5
X *Hurley	Flint	375	0	6,569	106	1.6	No	164	27.1	...
*Women's	Flint	40	0	707	10	1.4	0	0	...	...
*Goodrich General	Goodrich	24	0	500	18	3.6	0	0	...	...
X *Blodgett	Grand Rapids	132	0	1,632	65	4.0	12	39	35.0	67.0
X *Butterworth	Grand Rapids	224	0	2,331	80	3.4	18	40	19.6	28.0

CANCER SURVEY OF MICHIGAN—RECTOR

City General	Grand Rapids	35	0	540	21	3.9	50	9.2	5	25.0	15	30.0	5	100.0
X *St. Mary's	Grand Rapids	218	0	2,478	108	4.3	245	10.0	18	17.0	77	31.4	4	22.2
**St. Francis	Hamtramck	48	0	1,097	10	.9	41	3.7	2	20.0	2	5.0	0	75.0
*St. Joseph	Hancock	65	0	1,086	14	1.3	38	3.5	4	28.6	36	22.3	3	33.0
X *Highland Park General	Highland Park	156	0	2,545	42	1.6	161	6.3	12	28.6	0	...	0	100.0
**Holland City	Holland	50	0	634	5	.8	35	5.5	0	...	28	63.6	2	...
*Grand View	Ironwood	60	0	720	22	3.0	44	6.0	2	9.0	2	9.0	0	57.0
*Ishpeming	Ishpeming	44	0	453	6	1.3	23	5.0	3	50.0	47	24.4	4	40.0
*W. A. Foote Memorial	Jackson	150	0	3,756	47	1.3	192	5.1	7	15.0	20	27.7	2	...
*Mercy	Jackson	145	0	1,185	18	1.5	72	6.0	5	24.2	9	5.5	0	21.3
*Borgess	Kalamazoo	214	0	2,914	66	2.2	162	5.5	16	21.5	13	10.1	3	100.0
*Bronson	Kalamazoo	115	0	2,484	65	2.6	128	5.1	14	6.6	68	42.0	2	60.0
X *Edw. L. Sparrow	Lansing	145	0	2,473	30	1.2	162	6.5	2	12.0	72	41.0	6	...
X *St. Lawrence	Lansing	128	0	Not furnished	84	...	176	...	10	75.0	2	14.3	0	14.0
**Mercy	Manistee	56	0	474	4	.8	14	3.0	3	36.8	4	8.3	0	...
*St. Luke's	Marquette	85	0	1,081	19	1.7	48	4.4	No	data	No	data	No	data
St. Mary's	Marquette	65	0	999	3	.3	23	2.3	0	54.5	1	3.0	0	...
St. Joseph's	Menominee	50	0	1,400	No	data	70	5.0	6	37.5	4	8.0	0	50.0
**Mercy	Monroe	58	0	737	11	1.5	32	4.3	3	27.6	49	30.2	8	25.0
*St. Joseph's	Mt. Clemens	100	0	979	8	.8	49	5.0	16	12.1	16	20.7	1	...
X *Hackley	Muskegon	108	0	1,449	58	4.0	162	11.2	4	...	0	...	0	...
X *Mercy	Muskegon	100	0	2,175	33	1.5	77	3.5	0	...	0	...	0	...
**Pawating	Niles	35	0	500	No	data	38	7.6	0	...	0	...	0	...
Lockwood	Petoskey	32	0	804	15	1.8	40	5.0	2	14.5	0	...	0	...
Petoskey	Petoskey	40	0	829	14	1.7	45	5.4	3	21.4	1	2.2	1	33.3
*St. Joseph's Mercy	Pontiac	175	0	1,801	26	1.4	115	6.3	3	11.6	14	12.1	2	67.0
X *Saginaw General	Saginaw	133	0	1,546	82	5.9	116	7.5	12	14.6	39	33.6	5	41.6
*St. Luke's	Saginaw	50	0	1,174	13	1.1	58	4.9	3	23.0	9	15.5	3	100.0
X *St. Mary's	Saginaw	156	0	2,374	No	data	106	4.4	No	data	21	20.0	No	data
*Clinton Memorial	St. Johns	50	0	491	18	3.6	29	6.0	1	5.5	0	...	0	...
*Chippewa Co. War Mem.	S. Ste. Marie	68	0	1,146	7	.6	86	7.5	1	14.3	6	7.0	1	100.0
**Sturgis Memorial	Sturgis	38	0	516	15	2.9	29	5.6	4	26.6	4	13.7	0	...
**Three Rivers	Three Rivers	30	0	441	7	1.5	31	6.8	1	14.3	0	...	0	...
James Decker Munson	Traverse City	55	0	549	22	4.0	31	5.6	6	27.2	1	3.2	0	...
*Wyandotte General	Wyandotte	150	0	2,555	17	.6	78	3.0	4	25.0	7	9.0	0	...
Total		11,621	200	179,463	4,205	2.3	10,467	5.8	835	19.9	2,814	26.9	357	42.8

X Approved by the American Medical Association for interne training.

* Approved by American College of Surgeons.

** Provisionally approved by the American College of Surgeons.

County Distribution.—In the last analysis prevention and control of cancer devolve in large measure upon communities in which cancer patients live. The medical profession should have at its command the latest and most definite information on community aspects of the problem in order to formulate its program of cancer activities. Should the time come when state and local governments take an active part in this work, it would be necessary to have available to communities fairly definite information on the problem.

Table XIX shows some important facts about cancer in Michigan based on the county as a unit. In this table the population figures are estimated for the year 1933. Cancer deaths also apply to the year 1933, while the number of physicians shown in each county have been taken from the 1931 American Medical Association directory. It is realized that these two sets of figures are not exactly comparable, but it is believed they give a quite accurate picture of the situation. The number of physicians listed are those in private practice, there being about 860 additional physicians licensed to practice in the State. The number of living cancer patients has been estimated at three for each death, and as the number of practicing physicians approximates the number of cancer deaths, this calculation gives an average of three cancer patients per physician at any given time. It is interesting to note that in five of the counties the number of cancer deaths and the practicing physicians is equal, while in fourteen other counties a difference of not more than two between the number of cancer deaths and physicians is found.

Hospital Cancer Cases.—Seventy hospitals in Michigan with a bed capacity of 11,621 are reported on in this survey. Of this number 34 were of 100 beds or more capacity. They were distributed among thirty of the 83 counties and all but three were visited during the survey. Those not visited because of their small bed capacity, few cancer patients, or for other reasons were:

Hubbard Memorial, Bad Axe
Lee Memorial, Dowagiac
Goodrich General, Goodrich

Six other hospitals visited in the course of the field work did not submit the information requested. Because of this lack of coöperation, it is impossible to consider them further. These hospitals are:

Mercy, Benton Harbor
Shurly, Detroit
St. Joseph's, Flint
Monroe, Monroe
Memorial, Owosso
Beyer Memorial, Ypsilanti

Nine other hospitals to whom requests for information were sent did not respond nor were they visited in the course of the field work, usually because of their small size and their location. These are:

Wade Memorial, Coldwater
General Hospital and Clinic, Detroit
Lincoln, Detroit
Murray, Detroit
Grayling Mercy, Grayling
Hillsdale, Hillsdale
Iron Mountain General, Iron Mountain
Port Huron, Port Huron
City, South Haven

The number of adult patients admitted in 1933 to the seventy hospitals noted in Table XX was 179,463 of which 4,205, or 2.34 per cent, were for cancer. The largest percentage of cancer admissions in any one hospital was 5.9 in Saginaw General Hospital, Saginaw, and the lowest was 0.3 per cent in Grosse Point Hospital, Detroit, and in St. Mary's Hospital, Marquette.

The 825 cancer patients cared for by the University Hospital, Ann Arbor, account for but 5.6 per cent of the probable number of such patients in the State. The other 94.4 per cent remained to be cared for by other hospitals and physicians throughout the State.

Seven hospitals cared for 1,729 cancer patients during 1933, more than 41 per cent of those hospitalized, as follows:

Harper, Detroit	626
Dr. W. J. Seymour, Eloise	292
Receiving, Detroit	261
Grace, Detroit	211
Henry Ford, Detroit	125
St. Mary's, Grand Rapids	108
Hurley, Flint	106

Total1,729

It is seen that in the average general hospital in Michigan the number of cancer patients at any one time forms but a small percentage of total admissions. The small number of cancer patients, however, does not indicate their relative importance in the work of the hospital for the reason that, potentially at least, treatment received by these patients determines to a large extent the death rate from this disease. The statement just made can and will become an actuality when cancer patients are seen sufficiently early for adequate treatment to play a large part in their recovery and future health.

(To be continued in February issue.)

President's Page

KNOW THE TRUTH—SPREAD YOUR KNOWLEDGE

THE recent radio debate on the subject, "Resolved, That the several states should enact legislation providing for a system of complete medical service available to all citizens at public expense," and subsequent debates on the same topic in high schools, colleges, and universities of various states, including some in Michigan, should make plain to the medical profession of this State the insidious, progressive strides of the propagandists, and arouse our physicians to action. While we practitioners have been busy serving our patients, giving them the best skill that modern science can provide, and thinking little of financial return, certain propagandist foundations have been employing full time "directors," "statisticians" and others whose sole duty it is to create in the public mind doubts and uncertainties about our type of medical service. By devious schemes, they are cleverly trying to create an idea that the present system of medical service is unsatisfactory, that large numbers are unable to procure necessary medical care because of excessive costs, and that a system of complete medical service available to all citizens at public expense would better medical conditions. Magazines, the radio, high school, college, and university debates, propagandist brochures, well paid itinerant lecturers—all these and other implements of warfare are being used against us. Can we afford to be blind or to remain silent longer? No, we must recognize their handiwork and answer their false testimony.

If it is true that medical service rendered to certain classes during this depression may not have been as extravagantly satisfactory as that demanded by the well-paid propagandists, the same is also true regarding food, clothing and other necessities of life. Obviously, there was a lack of money to supply all the luxuries of service and commodities to everybody. It was an economic impossibility which even the statisticians themselves must admit.

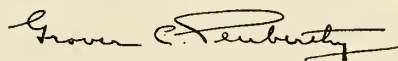
Every physician knows the base untruth of those misleading statements to the effect that many people are unable to secure necessary medical care because of excessive costs. This erroneous impression implanted in the minds of your patients must be corrected by you, Doctor. You alone can reassure the people you serve on this point. You must do this—at once.

We are Americans, and America wants no socialism. We cannot see why there should be a demand for socialized medicine, with the physician providing his services for cost; there has been no demand that banks loan money without interest; that clothing, food, all merchandise, heat and shelter be provided without profit, or that newspapers accept advertising for merely the cost of printing. Is it that Medicine has been chosen to lead in a campaign for eventual complete socialization?

One question which the public is not asked to think about is whether the people can afford socialized medicine. We physicians can and should answer this. No, the people cannot afford it. The quality of medical service would be inferior to that which is given under the present system; the value of that service which the propagandists are urging would be second-rate. The public would pay a high price for an inferior article.

The fallacy of the propagandist arguments is exposed in a number of excellent pamphlets available through the American Medical Association or from the secretary of your county medical society. Procure copies at once. Study them. Know the answers when your patients ask you questions about socialization of medicine. If you plead ignorance on these important matters, perhaps your patients' confidence in your scientific attainments may be undermined. Take no chance like this. There is no one who can fight your battle better than yourself, since it is you who contact the public. It is the people who must be reached, not other physicians.

Doctor, in your patients' and your own interests, Know the Truth and Spread your Knowledge.



THE JOURNAL

OF THE

Michigan State Medical Society

PUBLICATION COMMITTEE

A. S. BRUNK, M.D., Chairman.....Detroit
 HOWARD H. CUMMINGS, M.D.....Ann Arbor
 J. EARL MCINTYRE, M.D.....Lansing

Editor

J. H. DEMPSTER, M.A., M.D.
 5761 Stanton Avenue, Detroit, Michigan

Medical Secretary

C. T. EKElund, M.D.
 35 W. Huron Street, Pontiac, Michigan

Business Manager

Wm. J. BURNS, LL.B.
 2642 University Avenue, St. Paul, Minnesota
 or
 2020 Olds Tower, Lansing, Michigan

JANUARY, 1936

*"Every man owes some of his time to the up-
 building of the profession to which he belongs."*

—THEODORE ROOSEVELT.

EDITORIAL

1936

We enter upon the New Year with certain heritages from the past. The twentieth century industrial revolution has resulted in a permanent unemployment problem. The spokesman for a large manufacturer made the statement recently that machines did not reduce the number of workers. This is only apparent, there is some adjustment towards less mechanized lines of industry; by and large, however, the millions of unemployed and the millions who are engaged at almost needless jobs prove the inaccuracy of the statement. We may, therefore, take for granted a larger permanently unemployed and unemployable element in the population than before the depression. The indigent adult must be cared for out of taxation. The demands of humanity are that he must also be assured medical care when he is ill. Hitherto, the burden of such medical care which should be shared by the community has been placed upon the shoulders of the medical profession. Everyone, nurses, institutions, pharmacists, who have had anything to do with the rendering of medical care have received some remuneration—all except the doctor. Efforts of the Michigan State Medical Society are being put forth to correct this abuse of medical tradition. The laborer is worthy of his hire. This

JOURNAL has contained reports of the council and executive committee and other meetings so that the profession has had an opportunity to keep informed regarding whatever progress has been made.

The appointment of a full time executive secretary facilitates the better handling of details of office. The removal of the executive office to the state capital renders it more accessible from and to all parts of the state. Mr. Burns' experience in medical executive work in Ohio and in Wayne County has peculiarly fitted him for his new duties.

Dr. C. T. Ekelund's appointment as secretary takes ample care of the medical phase of the secretary's duties.

It has been emphasized time and again in these columns that all cannot be left to elected officers or to hired executives. It is urgent that every eligible physician should be an active member of the county society within whose jurisdiction he practices his profession. We use the word "active" advisedly. Each must enlist in a common cause, namely, to preserve the integrity of the science and practice of medicine.

"It ain't the commander general
 Nor the army as a whole,
 But the everlasting teamwork
 Of every bloomin' soul."

SOCIALISM AND MEDICINE

Bertrand Russell has declared himself repeatedly in favor of socialism. He, needless to say, has a solution for the problem of medicine. Speaking in general terms, he would make work legally obligatory to the extent that it is socially necessary. One's income should depend only on his willingness to work and it should therefore continue where the services one is capable of rendering were, for the time being, not needed. Doctors should receive certain stated salaries that would terminate only with their death, though they would not be expected to work after a certain age. This income as well as a living should insure a good education for their children. Should the general health of the community become so good that doctors are no longer required, some of them (doctors) could be employed helping solve the problems of medical research, investigating questions of

sanitation and diet. The great majority of physicians would be happier, in Russell's opinion, under such a system than they are at present.

This seems to us a bizarre piece of rationation on the part of a man who has shown superior intelligence in other departments of knowledge, such as mathematics and philosophy. To receive a salary or any stipend, call it what you will, for which no *quid pro quo* in service is rendered, is just another name of that degrading thing commonly known as the dole. Nothing would be more humiliating or distasteful to the class of men and women who spend years of hard work towards the attainment of a medical degree and license to practice medicine. The shunting of the unemployed physician into research is just as preposterous. The fields of medicine and of research are different. The research mind does not, as a rule, adapt itself readily to clinical medicine, nor, on the other hand, does the clinician adapt himself to the slow, painstaking, often apparently futile, problems of research.

Then, human nature being what it is and not likely to change, we can hardly conceive of many full time salaries to men who may be on the inactive list. The socialization of medicine, as of any other calling, will require a certain number of individuals especially trained. By organization, great efficiency will result, so that the excess, whether doctors or school teachers, or whom you will, must engage in occupations for which no special training or skill will be required.

TAKING THE LAITY INTO OUR CONFIDENCE

The late Dr. E. S. Judd, who was president of the American Medical Association in 1931-32, is accredited with the following statement:

"One reason the charlatans and irregular practitioners are able to continue in their practice is that there still is so much uncertainty and mystery about disease. We cannot hope to be rid of this sort of thing until all of the mystery is cleared up. We can help society a great deal, however, by utilizing every effort at our command to educate people along medical lines. The idea of medical education for the public is not a new one, but the importance of it is more fully realized now than it was in former years."

Secrecy is not one of the besetting sins of the medical profession of this state. There was a time, long since, however, when it was justified if for no other reason

than the fact that there was very little to tell. Today, owing to the advances in medicine and allied sciences, there is nothing that may not be told to those capable of understanding it. As a profession, we have no secrets, though the body of medical and surgical knowledge has become so great that not even the medically trained person can comprehend it all.

The Joint Committee (the component societies are well known) has been instrumental in carrying on public education in the basic principles of medicine. The Cancer Committee of the Michigan State Medical Society is carrying on an educational movement not only among the laity, but among physicians, that should be welcomed along the line suggested by the late Dr. Judd. Not only regarding cancer, but also tuberculosis and heart disease, are physicians willing to address lay groups and tell them all they may want to know.

There is a lot of quasi-science instilled into the minds of the laity by self-interested individuals and organizations. The only way to meet the false is by the true. It may take a long time but the effort is worth while.

THE AMERICAN BOARD OF RADIOLOGY

The twenty-first annual meeting of the Radiological Society of North America was held in Detroit, December 2 to December 6. Significant that this national society should have celebrated its coming of age, in this state. Immediately before the sessions of the national meeting, the American Board of Radiology met and held its annual examinations. The Board of Radiology is an examining body distinct from any other society except that it is composed of three elected representatives from each of five societies whose object is to improve the science of radiology in its broadest aspects. The American Board then is made up of representatives from the College of Radiology, the American Roentgen Ray Society, the Radiological Society of North America, the American Radium Society and the section of Radiology of the American Medical Association.

The American Board of Radiology is two years old. Its purpose is to examine into and to certify as to the qualifications of physicians limiting their work to radiology.

to practice the specialty of radiology in its entirety or any of its branches. Indirectly, the purpose is to elevate the standards of the specialty. The American Hospital Association has already recognized the laudable objects of the board by recommending that only certified radiologists be appointed as chiefs of radiological departments of approved hospitals.

As everyone is aware, a diploma from a class A medical school and a state license entitles one legally to practice medicine and surgery. Needless to say, this is a minimum qualification and only one's discretion and fear of consequences prevent him from attempting those types of medical or surgical service which only long and concentrated study and experience would warrant. There have been rash souls, however, let us hope the number has not been large, who have not realized their limitations. A healthy movement has been on foot for some time to certify certain qualifications of specialists. The American Medical Association, the American Association of Medical Colleges and the American Hospital Association as well as various specialist groups have realized the need of certain standards in all specialties.

Since the board was organized, approximately seven hundred candidates have been examined and five hundred and fifty certificates have been granted. After 1937, the minimum training for x-ray specialists will be three years in approved teaching institutions together with two years' clinical experience, and each applicant must be a member of the American Medical Association.

A distinguishing feature of radiology is the fact that it is not regional in its application. In both diagnosis and therapy, it embraces almost the entire field of medicine and surgery. This fact alone demands a higher degree of competence than is usually recognized. The efforts of the American Board of Radiology should therefore be welcomed as a means of giving the specialty the standing and respect that its importance warrants.

On page 57 in this number we publish a résumé of the National Social Security Act. The abstract was made by Mr. Burns, executive secretary of the Michigan State Medical Society. The economic and social interests of medicine are becoming so broad that no apology is offered for including in

a technical medical publication matters that may seem foreign to the practice of medicine as commonly understood.

Attention is drawn to the abstracts in this JOURNAL of papers that have recently appeared in the *Journal of the American Medical Association*. These abstracts enable the physician whose time may be limited to keep informed on medicine and surgery in general and the presentation of the date of the original article will enable him to turn to his *Journal of the American Medical Association* for the entire dish of which the abstract is a sample. The abstracts are not inserted just to fill space. They are printed from time to time for their intrinsic value.

The United States is to have a medical guest from Switzerland during the coming months in the interest of the National Association or Congress on Hepatic Insufficiency at Vichy which will be presided over by a chief of medicine of the faculty of Paris. In this connection, the gall bladder contributions in this number of the JOURNAL are of special interest. To quote from Dr. Musser's paper:

"Certain saline cathartics such as sodium sulphate or phosphate and magnesium sulphate help to empty the gallbladder. The nicest of these saline laxatives is effervescent sodium phosphate taken in the morning before breakfast in dosage sufficient to bring about a thorough evacuation of the bowel and bile. Here again the same effect is obtained before the washstand in the bathroom as in walking to an ornate pavilion before breakfast and being served a cup or mug of a vile tasting "natural" combination of salts by a pretty little attendant in a blue dress, cap and apron. How well the French know the psychological reaction of the American to these dressings and disguises of a cup of salts in solution. Each year at Vichy is held a yearly conference on gallbladder disease where the beauties and attractions of the spa are pointed out as well as the efficacy of the waters from the springs."

THE MUSE HAS TA'EN HIS DAY OFF

Ah! Weel, noo, ma dear freen's, ah wid fain write
for thee,

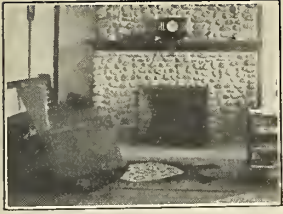
A wee few o' ma vearses o' mischief an' glee,
Bit ah'm no verra sure o' ma writing or golf,
For th' muse, ah believe, has ta'en his day off.

Bit ah ken verra sure as ah sing ilka day,
That it's hard tae be happy, as taxes we pay,
Sae th' "lord o' th' mighty" wi' high hat tae doff,
Wid please us reel weel, if he'd tak a day off.

There are men wha are big i' political ways,
That haenna th' gumption for tae ken that it pays
Tae keep frae th' crooked an' bickerin' trough.
Oh, Lord, may it please Thee—hae them tak a day
off.

WEELUM.

JOUR. M.S.M.S.



The Editor's Easy Chair

THE MEDICAL GUILD

The history of the guild (non-medical) is interesting. Originally spelled *gild*, it had its origin in medieval times. The medieval guild was a voluntary association for the mutual aid and protection of its members. The medieval church on the principle of the brotherhood of man favored the early growth of guilds that they might displace the older heathen banquet to which their origin has been ascribed by some. The guild idea is in keeping with the gregarious or associative spirit so characteristic of mankind. In the year 884, the villeins were prevented from forming guilds or associations, "Vulgarly called gilds," against those who despoiled them. Interesting it is to note that the name was denied to the lower classes, whose unions were looked upon as conspiracies or conjurations. Subsequent to the Norman Conquest of England (1066) many guilds were introduced. Religious guilds were presumed to flourish under the Anglo-Norman kings. The conditions of membership were an entrance fee, a small annual contribution to the common fund from which the brethren were aided in old age, sickness, and poverty, or in losses by robbery, shipwreck or by fire, or as it was quaintly expressed, if he "fall into poverty or be injured through age, or through fire, or water, thieves, or sickness." Guilds were as a rule private societies which played an important rôle in the social life of England as well as the continent.

* * *

The Merchant Guild and the Craft Guild came into existence soon after the Norman conquest. They were simply new applications of the guild principle. It was considered a great honor to be a member of the *Gilda Mercatoria*. Many, perhaps all, of the great cathedrals are the design and work of members of the Crafts Guilds. The Craft Guild comprised all the artisans in a single branch of industry in the particular town. The members worked under inspiration, as

is apparent to visitors to these monuments of industry of the past.

"In the older days of art,
Builders wrought with miser care,
Every seen and unseen part,
For the gods see everywhere."

The guild had an honorable origin and an honorable history. Its dissolution has been due to a large extent to the industrial revolution which had its beginning in the eighteenth century, and its end is not yet.

* * *

Did it occur to you how medicine fits into the guild picture? Medicine is the oldest service to mankind and one of the most honorable. We often feel that medicine is a very private and individualistic calling; but is it? In the first place, the physician has been required to spend a comparatively long apprenticeship as a student and as an interne in a hospital. He has had to procure a license by a properly constituted board who examined him regarding his qualifications; but this is not all. Of recent years after an apprenticeship and study he must come before another board if he desires to practice any of the medical or surgical specialties. Nothing individualistic in this. The subject of medical ethics is so well understood by everyone who has gone far enough to obtain a license to practice that I shall not go into it in detail.

Again an individual in a private business (not medicine) may advertise as freely as he chooses. Not so in medicine. The ethics of business differs radically from the ethics of medicine. This is one of the features a non-medically trained person cannot understand. The medical guild is eternal in its endeavors to improve the ability of its members as well as the service its members may render. In this it is true to the spirit of the medieval crafts guild. If a brewer in the middle ages was a member of a Brewers' Guild, and made bad beer, the master brewer was compelled to drink a quart of it and then was soused in the hogshead (Scammon). Another characteristic common with the guild of old is the fact that the members concealed no secrets from one another; where a knowledge of technic was communicated freely to all members of the guild, so there are no secrets in medicine. In private enterprises the patenting of formulas and processes is perfectly legitimate; not so in medicine. Formulas are free to all who

are capable of using them. Imagine the fortunes that might have been made in insulin, diphtheritic antitoxin, salvarsan, and many other discoveries. Every medical discovery as it is made and confirmed is given freely without royalty or honorarium. I say when confirmed; the medical profession is wholesomely skeptical. The product must possess real merit. No medical discovery is accepted until it has been checked again and again by investigators working with the most rigorous skepticism. "At the court of science, every prisoner is suspected until proved innocent by a cloud of witnesses before an implacable bench of unemotional judges."

The Medical Guild existed in medieval times and the officers of our county, state and national societies, with whom we include all medical teachers, are, if not lineal, at least spiritual descendants of the masters of the ancient and honorable guilds of centuries past. Professor Scammon* of the University of Minnesota writes:

"Five hundred years ago, most human affairs, when conducted in communities, were organized in the form of guilds. Today, medicine and related subjects are perhaps the only form of human activity that are organized in guilds, or as we call them, organized professions . . . (Medicine) passed through the commercial revolution of about 1600. It passed through the industrial revolution from about 1750 to about 1830. Yet throughout these changes, it has kept its original form."

The social and industrial upheavals of the past were as great as the apparent debacle the world is facing today. Yet medicine in its guild form has survived—the survival of the fittest. This survival value should be looked upon as significant and not an indication that it must meet the fate of its early contemporaries.

Science is occupied in the quest of truth. Were teachers of morals wise, they would seize upon scientific training as the basis of moral culture. Practical and daily companionship with the truth, as an essential partner in an enterprise, helps to make men honest. Habit in thought and method impresses itself upon the character. Honesty is acquired by practicing honesty better than by fear of punishment or by hope of reward. Honesty can be made a tool that fits the hand, that serves, and is useful. One can adjust his life to honesty and make it his companion. Scientific training helps to this end.—WARBASSE.

BE PREPARED FOR YOUR CANCER PATIENT

CANCER OF THE BREAST*

Importance of Early Detection and Immediate Operation

A consecutive series of 149 radical mastectomies, with a current 94 per cent follow-up, were recently studied with special reference to the advantages of early operation with some interesting findings. The series covered the years from 1916 to 1930—that is, any one of the patients could, conceivably, have survived five years or more. As a matter of record 40 per cent did survive that long and 33 per cent were found to be living and well. The suggestive findings, however, began to appear when the cases were further examined in a more selective way.

There are many factors that combine variably to influence the prognosis of breast cancer, or of any cancer for that matter, and so many of these are clinically imponderable that one must be on his guard about dogmatizing about facts drawn from the two or three that can be ascertained with partial or complete accuracy. Two of these latter are (a) the time interval between detection of a breast cancer and its adequate treatment and (b) the freedom from or involvement of the axillary nodes with metastases at the time of operation. Of these the time interval can only be estimated from the moment when a given patient first happened to notice a given growth, whereas axillary node metastases can be detected accurately only by painstaking gross and microscopic study:

Disregarding the acknowledged influence of age, of the varied invasive qualities of individual tumors and types of tumor, the above mentioned 149 patients were first divided arbitrarily into two sub-groups, one whose axillary glands were normal at operation, the other in which axillary metastases were already established. When this was done it appeared that 61 per cent of the former survived five years or more in contrast with but 27 per cent of the latter. Each of these sub-groups was then further sepa-

*Scammon, Richard E.: What is guild-medicine? *Minnesota Medicine*, 16:164-170, (March) 1933.

*This is the second paper published under the endorsement of the Cancer Committee of the Michigan State Medical Society.

rated into those patients who reported their growth and were given adequate treatment within one month of its detection, and those who allowed any period over one month to elapse. By this process a curious finding appeared. Whereas, in the group of patients with normal axillæ, early detection and operation produced a five-year survival of 76 per cent as against 51 per cent where consultation or operation was delayed, the presence of involved axillary glands in the other group seemed to vitiate any benefit from early operation—28 per cent as against 27 per cent. Finally, the whole series was divided into the approximate third who had treatment within one month and the two-thirds whose treatment was delayed, and the ratio of involved to uninvolved axillæ counted in each case. In the promptly reported and operated this ratio was 1.15:1. In the delayed group the ratio had more than doubled, namely, to 2.25:1.

Such figures as have been cited are too striking to be disregarded, even though they do not constitute "proof," and their implications may be summed up somewhat as follows: If a woman detects a tumor in her breast that is a cancer, seeks her doctor within a month and is promptly operated, her chances of being lucky enough to have escaped axillary metastases tend to be fifty-fifty. If lucky, her chances for a cure are really good, three out of four. If unlucky, she is at least no worse off with her one chance in four for a cure than her sister who procrastinates or consults a procrastinating physician—and neither she nor he need feel remorse or chagrin. The procrastinating sister who has luck in the matter of axillary involvement seems to get a better break than she deserves with her 50 per cent chance of cure. Even she or perhaps her doctor might have hurried a little had she known in advance that a few days or weeks might mean the difference between a one in two or a three in four gamble on her life.

Granting then reasonable promptness on the patient's part, the outcome, in so far as it can be controlled by taking advantage of any favorable odds, is squarely the responsibility of the doctor. Shall he base his advice on his clinical acumen or confess frankly that real safety for the patient lies only in excision and microscopic proof? Time was when a breast cancer could be made the subject for a rather fascinating

and impressive excursion in the refinements of differential diagnosis, whether through the medium of the spoken word in classroom or clinic, or by recording one's observations in textbook or periodical. Such finely drawn clinical or pathognomonic signs lose their impressiveness, however, when they can be shown mostly to occur so late in the course of the disease as to be of little use in helping effect a cure. Such being the case, we have no other resources left in early and doubtful cases than transillumination, roentgenographic studies, or diagnostic excision. The first two have been relatively recently introduced and in skillful hands have yielded interesting and often useful differential pictures. Still they do not give the satisfaction that comes to patient or physician from the elimination of a tumor and the exact knowledge of its nature that only a microscopic examination can bring.

In the light of the above, the wisest advice that can probably be given a woman with a breast tumor is that it be excised (*not incised*)—radically if the signs of clinical (and therefore late) cancer are obvious, conservatively if the diagnosis is doubtful, yet under general anesthesia, removing a generous amount of tissue surrounding the tumor, with the electrocautery, with a pathologist at hand for immediate gross and microscopic examination, and with the consent of the patient for immediate radical operation if indicated.

Plea for an Esprit d' Corps

"When everyone becomes conscious of the fact that the only excuse and objective of organized medicine is the mutual and individual benefit of all its constituents, and that individual efforts are of no avail against our organized opponents, we will see faster and smoother progress. It is hard for all of us to take the time to perform the various duties which organized medicine demands, but unless we work for ourselves, trying as far as possible to make an equitable division of labor, the lay public (unknowingly) and our organized enemies, are going to come closer and closer to running our business for us in a regrettable fashion. Guilds and Unions are forgetting their individual differences and uniting against their common enemies, whoever or whatever they are. The practice of medicine, being necessarily a peculiarly individualistic institution, so far has whole-heartedly united on only one thing, namely, scientific medicine. I am afraid that we will be the last to unite upon the other important questions which are necessary to preserve the foundations of scientific medicine itself."—From Annual Report of Edwin P. Vary, M.D., Niles, Secretary of Berrien County Medical Society, December 9, 1935.

A MOMENT OF MEDICAL HISTORY

WILFRID T. DEMPFSTER, D.Sc.

Ann Arbor, Michigan

PREVENTIVE INOCULATION (cont'd)

By the time of Pasteur's death in 1895, various methods of immunization had been suggested in outline. Vaccines had been prepared of attenuated organisms, of fully virulent organisms and from killed bacteria. Antitoxin had likewise passed its early experimental period and was introduced extensively into medical practice. From this period to the present, immunological methods have found increasing application to a wide variety of communicable diseases, and, more important, the value of each method of inoculation has been subjected to a rigorous scientific analysis which was virtually unknown in the earlier days.

The pioneer studies on immunity met great difficulty in determining the susceptibility or resistance of a person or animal to a certain disease. In several diseases, test materials have facilitated the detection of the state of immunity. Studies on test reactions began in 1891 with Koch, who found that a glycerine filtrate of a tuberculosis culture when injected into a tuberculous guinea pig caused a severe local reaction, constitutional symptoms and usually the animal's death. A similar injection of tuberculin, as the substance was called, into a normal animal produced only a local ulceration. Tuberculin thus served as a reagent to distinguish infected from non-infected animals. Calmette (1907) applied the test to the conjunctiva and von Pirquet in the same year devised a cutaneous test that has been widely used, though largely supplanted now by the intracutaneous test of Mantoux (1908). This test has been important, particularly in the negative diagnosis of tuberculosis in children. Tuberculin has likewise been used for the protection of herds of cattle from infected animals.

Mallein, a glycerine extract of the glanders bacillus, discovered in 1891, has provided a reagent for detecting the immunity or susceptibility to glanders.

Römer, in 1909, made a significant advance in the testing of immunity when he made intradermal inoculation of minute doses of diphtheria toxin into guinea pigs.

A localized swelling and erythema developed at the site of inoculation if the animal were susceptible to diphtheria. Antitoxin in the blood of an immune animal prevented the reaction. Following up this study, Schick (1913) devised a method for detecting the presence or absence of antitoxins in the blood by means of a skin reaction test. This consisted of the intradermal injection of a standard dose of toxin into one arm while a control injection of heat inactivated toxin was inserted into the other. A negative reaction was characterized by the absence of response in either arm; a positive by an inflammatory response in the arm receiving the standard injection. In a short while, it was found that Schick positives were susceptible to diphtheria while negatives were not. Likewise, immunization changed a positive to a negative. This information formed the basis for the practical immunization of children against diphtheria. The Dick test (1924 and 1925) for scarlet fever has had a similar importance in the detection of immunity. The technic of inoculation was only a slight modification of that used in the Schick test.

These tests have given valuable information in distinguishing naturally immune and susceptible individuals in a population. With this basic knowledge, it has been possible to test the duration of immunity, to establish adequate controls in experimental procedure and to select those individuals requiring artificial immunization.

It was soon realized, however, that the prevention of disease involved factors other than the detection of the non-immune members of the population with their subsequent inoculation. Practically, there were difficulties in a program of wholesale immunization and meanwhile the population existed as a heterogeneous group of individuals. Some had clinically typical or atypical diseases; some had latent infections or were healthy carriers; while others were immune and uninfected or susceptible and uninfected. Important epidemiological questions were thus suggested. Since the early 1920's, Topley and Greenwood in England, and Webster, Amoss and Pritchett in America among others have attacked the problem experimentally. In one type of experiment, isolated animals, usually mice, have been subjected to each of the various factors involved in infection, while in other experiments, whole populations or herds were

studied and the different variables analyzed statistically.

Further complications became evident in the practical problem of preventive inoculation against disease insofar as the infecting organisms themselves were concerned. It has been difficult to account for the sudden rise and quiescence of many epidemics, and the concept has developed that there is a natural fluctuation in the virulence of organisms of infection over a period of time. This point, however, has been difficult to prove experimentally.

It has been frequently discovered that bacteria of a particular species exist in various races or strains. This is true of the organisms of tuberculosis, meningitis and typhoid among others. In pneumococcus, as many as thirty strains have been isolated. The protective immunization of an individual against one strain of bacterium will probably leave him susceptible to infection by other strains of the same organism. In other words, much evidence has been produced to indicate that there is a high degree of specificity in the immunization reaction. This specificity has been emphasized also in studies dealing with immunity reactions due to the inoculation of chemically pure proteins.

On the other hand, evidence was procured as early as 1904 that the injection of peptone into immunized animals caused an augmentation in the state of immunity. The injection of perchloride of mercury caused a similar increase in agglutinins. Walbum, since 1923, has shown that manganese, cobalt and beryllium result in an increase in antitoxin or agglutinins if given early in an infection. There has likewise been some evidence that there are certain interbacterial effects; for instance, there is a rise in agglutinins for bacillus coli with the injection of staphylococci into previously immunized rabbits. These effects which have been called anamnestic reactions are slight and often irregular.

Another type of immunological procedure which has received wide use is concerned with the inoculation of non-specific protein. Some protein, such as milk or killed typhoid bacilli, other than the organism being combated, is injected into an individual. A fever results and there is a general stimulation of the disease-resisting mechanism of the body. This reaction has been of some use in the prophylaxis or treatment of clinical

cases in which the specific immunizing substance for some disease was unknown or unavailable.

An important advance in immunological methods, possibly based on the non-specific reaction, has been the application of inoculation to surgery. In abdominal surgery where there is considerable risk of infection, heat-killed colon bacilli are injected into the peritoneal cavity. A day or two after the injection, the patient is operated with a reduced hazard of peritonitis. Though pre-operative inoculation has been attempted various times during the past thirty years without success, its introduction as an apparently effective measure is due primarily to Steinberg (since 1927) and Hermann (1929).

Though the problems facing the immunologist have multiplied due to such factors as the above during the forty years since Pasteur, experimental work has been improved through the increasing knowledge of the chemistry of immunity, through attempts at standardizing toxins, sera and vaccines, and through the application of statistical methods of evaluating the efficacy of immunizing methods.

The standardization of immunological reagents for skin testing, prophylaxis or treatment has been essential to the practical immunization against disease. How the standardized units are defined has been of little importance so long as each unit gave a measure of immunological activity, and could be determined quantitatively with a small degree of error. Injections into laboratory animals of specific size and *in vitro* tests served as the criteria for comparing the immunological activity of a reagent. The minimum quantity of toxin or of organisms which would kill a laboratory animal, the minimum lethal dose, was an early means of designating bacterial activity, and the classical method of standardizing diphtheria antitoxin by Ehrlich (1897) was a measure of the amount of antitoxin required to neutralize one hundred minimum lethal doses of toxin. Later Ehrlich designated a particular batch of antitoxic serum as his standard. Other antitoxins were compared with the standard and their strength was indicated by antitoxic units (A.U.).

In 1923, the Biological Standardization Commission of the League of Nations began to study standards for antitoxins and vaccines. Ehrlich's antitoxic unit was ac-

cepted as an international standard. In 1926, tetanus antitoxin was similarly standardized, and shortly afterwards a provisional standard was considered for scarlet fever antitoxin. Tuberculin was also standardized and attempts were made to define precisely the dosage for the Schick and Dick tests.

The ordinary method for standardizing bacterial vaccines has been the enumeration of the number of millions of organisms of maximum virulence per cubic centimeter of vaccine. Sera have been similarly standardized by determining the amount of serum having an antibody content sufficient to counteract the effect of a specified number of organisms.

Another significant advance in the methodology of preventive inoculation has been the application of statistical methods to assessing the value of a particular protective measure. Since 1901, Karl Pearson's journal of statistics, *Biometrika*, has published occasional articles on the statistical value of inoculation methods applied to whole populations. Articles have also appeared in other journals. MacDonnell, Brownlee and Maynard were among the pioneers in the application of statistics to immunological problems. In 1915, the activity of these men was supplemented by an outstanding paper by Greenwood and Yule. In this contribution, the conditions which were necessary to secure data from which valid statistical conclusions could be drawn were laid down. The authors also developed the statistical theory of the way in which immunization results could be interpreted. The views of Greenwood and Yule have dominated much of the subsequent analytical studies on the value of inoculation.

Immunizing methods have been applied to more than a score of disease conditions. Active immunization with killed organisms or viruses has been applied with success to lobar pneumonia, rabies, typhoid fever, cholera, foot and mouth diseases, yellow fever, and plague. Toxins of bacillary dysentery, scarlet fever, tetanus, diphtheria and glanders injected into an organism often with a quantity of antitoxin likewise induced active immunity to these diseases. Living organisms, either attenuated or fully virulent, have been used to produce immunity to smallpox, rabies, poliomyelitis, diphtheria, hog cholera, cattle plague, anthrax,

swine erysipelas and infectious abortion in cattle. Frequently quantities of immune sera are injected with or before the organisms, in order to protect an inoculated animal or person during the period before active immunity is established.

Passive immunity, which is a short-lived immunity induced by the injection of immune serum, has been used chiefly in therapeutics. It is particularly effective against the products of bacterial growth.

Such sera have been used in tetanus, diphtheria, scarlet fever, swine erysipelas, meningitis, lobar pneumonia, plague, foot and mouth disease, pleuropneumonia in cattle, poliomyelitis and measles. In certain diseases, as the last two mentioned, difficulties have arisen in infecting larger animals, such as the horse, so that serum cannot be obtained in quantity. Nicolle and Conseil, in 1918, suggested that sera from patients recovering from measles should be used in immunizing children against disease. About a decade later, Flexner and Stewart used convalescent serum in poliomyelitis. The technic has more recently been suggested for the treatment of acute encephalomyelitis.

Many diseases, such as tuberculosis, the common cold and influenza, despite much study, have still eluded attempts at successful immunization, but there has been no lessening of effort regarding them. For about ten years, attempts have been made to inoculate children against tuberculosis by the use of an attenuated strain of tubercle bacilli known as the B.C.G. vaccine. This method, however, awaits extensive statistical study.

During the twentieth century, protective inoculation has progressed steadily; unanticipated difficulties have arisen, but the practical problems of inducing immunity to disease have met with success in many quarters. Not only has the method of preventive inoculation been used in protecting individuals against accidental or epidemic infection, but it has been applied to reduce the hazard in abdominal and genito-urinary surgery where strict asepsis is not assured.

I could never divide myself from any man upon the difference of an opinion, or be angry with his judgment for not agreeing with me in that from which, perhaps, within a few days I should dissent myself.—SIR THOMAS BROWNE.

THE MEDICAL RELIEF PROGRAM IN MICHIGAN

By WILLIAM HABER, Administrator
State Emergency Welfare Relief
Administration

The medical relief program of the State Emergency Relief Administration is based on the principle that the traditional relationships between the family and its physician or dentist are to be maintained. The details of the program were worked out in the fall of 1933 by committees representing the Michigan State Medical Society, Michigan State Dental Society, the Michigan Nurses' Association, and the State Emergency Welfare Relief Commission. The essential policies, based largely on the medical relief program outlined by rules and regulations of the Federal Emergency Relief Administration, were designed to permit practicing physicians to retain their personal relationship with those of their clients who had been forced by circumstances onto the relief rolls.

The free choice of a doctor is limited only by practical considerations. In order to insure good service and an equitable distribution of work, for example, the number of families who choose one physician or dentist may be limited. Patients are expected to choose practitioners within a reasonable distance of the patient's home. When it is desirable the County Relief Commission may zone the county to solve transportation problems.

Some unforeseen difficulties could be expected to arise as this new program got under way. A state-wide system of medical relief was new both to the county administrators and to the doctors. Moreover, during those early months of the Relief Commission, the county relief administrators were overburdened with the tasks of building up their relief organizations and initiating the CWA program which placed 150,000 on public works projects in a month's time. Due to this pressure of administrative detail, county administrators, in some instances, were unable to give the medical program the attention it warranted. In spite of the disadvantages which surrounded initiation of the medical program the unforeseen early difficulties have been adjusted and misunderstandings have been cleared up. The experience of officials in the state

office and the voluntary comments made by members of the medical profession indicate that misunderstandings have been surprisingly few in number, that the medical program has functioned reasonably satisfactorily, and that the difficulties which have arisen have been minor ones.

A considerable amount of local autonomy has made it possible to modify the local medical program to meet special situations. To facilitate coöperation the State Commission has constantly suggested that county commissions request county medical societies to appoint Medical Advisory Committees to which problems involving the relationships of the two organizations might be referred. In counties using this plan, the Advisory Committees have been of valuable assistance in adjusting difficulties. The State Commission urges all county medical societies that have not appointed an Advisory Committee to do so in the near future. By this arrangement physicians will not be required to adjudicate their own complaints.

One of the first decisions concerning the medical program was that of fees. A schedule of maximum fees for some services was stipulated in the original rules governing the program. The maximum fees were set at 75 cents for office calls, \$1.50 for house calls by day and \$2.50 by night, and \$15.00 for obstetrical cases. After some experimentation, a general ruling was adopted whereby the maximum fee to be allowed for services not mentioned on the original schedule was one-half of the local prevailing fee. The prevailing fee is determined with the aid of the local medical advisory committees where these exist.

The authorization of medical services is another problem which caused some confusion. A federal and state ruling provides that expenditures for any purpose cannot be made without authorization from a representative of the county commission. Some physicians rendered medical services without authorization and submitted the bill to the county relief administrator before determining whether the bill was a legal charge on relief funds. Realizing that certain emergencies arise in which a physician cannot wait to obtain authorization for medical services, an exception was made allowing the county administrator to make a retroactive authorization, if the re-

quest was presented within 48 hours after the service was performed. Authorizations are no longer an outstanding difficulty. At present there is very little misunderstanding between administrators and physicians regarding authorizations.

The average cost of medical care over a period of several months has been about \$1.00 per month for each family on relief. The average cost per case actually receiving medical services in the month of October was \$3.18. The total cost of medical relief during the same month was \$158,349.00 for the state. At this time the case load was beginning to decrease because of transfers to WPA projects. In April, when the case load was much higher, \$198,082.00 was spent for medical care. These totals do not include any of the medical fees paid by local governmental units which are not a part of the ERA, nor do they include the cost of hospital services.

The State Emergency Relief Commission is in a period of transition at the present time. The employable persons who have been on relief are being given jobs on federal work projects and the responsibility of caring for unemployable cases that remain on the relief rolls has reverted to the state and local governments.

The Relief Commission will continue its work, however, with state and local funds. It will administer the \$9,000,000.00 fund appropriated for relief by the state Legislature, and an additional \$5,000,000.00 to \$6,000,000.00 appropriated by the local Boards of Supervisors for the care of the needy in their counties. Relief will be provided both for the unemployable cases that were not eligible for the federal works program and for cases that are ineligible for work relief because they came onto the rolls after November 1, 1935. An analysis of the relief rolls in Michigan, made in September, indicates that there are about 40,600 unemployable cases on the relief rolls.

Present indications are that direct relief must also be given to about 10,000 so-called "border line" cases who could work if sheltered jobs could be secured for them, and to many new cases which are ineligible for WPA employment. These cases will be the responsibility of the State Emergency Relief Administration. Together with the unemployable group, they will represent a total of some 200,000 persons.

The State Relief Commission, under this

revised program, has given no indication of changing its medical program. It seems probable that it will continue to function as at present, and will provide the same type of medical care to the persons left on relief that it has in the past.

Diuretic Action of Potassium Salts

The biochemical studies of Norman M. Keith and Melvin W. Binger, Rochester, Minn. (*Journal A. M. A.*, Nov. 16, 1935), indicate that potassium is readily absorbed from the intestine, disappears quickly into the tissues, and can be rapidly excreted by the kidney. The small amount in the blood serum even after ingestion of a considerable quantity, raises the question as to its manner of storage and subsequent liberation for excretion. The two chief storehouses of potassium are the erythrocytes of the blood stream and the cells of voluntary muscle. In health, any excess seems to be quickly removed from the blood serum and is then gradually excreted by the kidneys. Following depletion of potassium due to starvation and that seen in cardiac edema, there is retention with a refilling of the muscle storehouse. The efficiency with which the kidney concentrates potassium, at least fifty times, readily explains the rapid elimination of a great excess taken in the diet by eaters of potatoes, for example. The ability of the kidney to excrete potassium may be maintained late in chronic nephritis in a similar way to its ability to eliminate creatinine. The much greater concentration by the kidneys of potassium than sodium may possibly be explained by less reabsorption of the former in the renal tubules. The authors' results together with those of Miller again emphasize the well known fact that potassium and sodium have certain independent biologic functions, as, for instance, the high concentration of sodium in blood serum and interstitial fluid in contrast to the small content of potassium, the high concentration of potassium in the erythrocytes with little or no sodium present, and also the initial retention of water with the ingestion of sodium salts in contrast to loss of water after taking potassium salts. The present study shows that five potassium salts cause diuresis. The cation potassium is readily excreted in each instance by the kidney; it also brings about a definite shift of the acid-base equilibrium in the urine toward the alkaline side. These two facts offer a possible explanation for its diuretic action. Of the five salts the nitrate produced the most marked effect, which emphasizes the importance of the anion as well as the cation in considering the diuretic action of a given salt. The authors state that their clinical results with potassium salts confirm the results of the therapists of the last eighty years. They prefer potassium nitrate because, after its use, diuresis frequently occurs. In their experience it is less likely to cause toxic symptoms than ammonium nitrate. Its action, when combined with other diuretics, is also often satisfactory. Organic compounds of mercury act more rapidly but in so doing may injure tissue, such as those of a diseased kidney. Potassium salts, more particularly the bicarbonate, acetate and citrate, produce a rapid shift in the acid-base balance, rendering the plasma and urine more alkaline. This action suggests that these potassium salts may be more effective and less likely to cause edema in combating acidosis than sodium salts. They might also be used when a strongly alkaline urine is desired.

MEDICO - LEGAL DEPARTMENT

INTERESTING CASES BRIEFED

By Mr. Clayton C. Purdy,* Detroit

We herewith present two or three cases which have been briefed in the various publications mentioned and which were printed in the October issue of *Current Legal Thought*. We thought these cases would be of interest to the physician.

**Physicians and Surgeons—Recovery for Unso-
lited Services Rendered in an Emergency**—The defendant's testator, seriously wounded, evidently by his own hand, was found by two friends, who summoned a physician. The latter, in turn, sent for the plaintiff, a surgeon. The plaintiff had the testator removed to a hospital, and there operated on him, to no avail. The plaintiff brought suit against the estate for the services rendered. Whether the testator objected to or acquiesced in the treatment was left in doubt by the evidence. From an adverse judgment, the defendant executrix appealed. Held, that since no attention could be given to the testator's attitude in the extremity, his estate was liable for the necessary services. Judgment affirmed. *Matheson v. Smiley*, (1932) 2DLR787 (Man.).

The court was of the opinion that the case fell within the principles applicable when a defendant lacks the mental capacity to contract. A patient unconscious at the time necessary medical services were tendered, is, like a lunatic, liable for their value. *Cotnam v. Wisdom*, 83Ark.601, 104SW164 (1907). In such an emergency the consent usually necessary for an operation is not required to free the surgeon from liability for a battery. *Jackovich v. Yecom*, 212Iowa914, 237NW44 (1931). Nor is the quasi-contractual right of the surgeon to recover based upon "implied" consent, but on the fact a benefit has been conferred by one who has not acted officiously in the circumstances. An affirmative refusal of treatment might, therefore, seem to make the act not only officious but also an unprivileged battery. If the patient has attempted suicide, public policy might well override his objections. Cf. *Can. Crim. Code* (Snow, 4th ed., 1928) Sec. 270; but see *Meyer v. Supreme Lodge*, 70NE111 (1904). But if immunity to an action for battery be granted, recovery for services need not necessarily accompany the privilege of imposing them. Failing such recovery, however, the doctor would be without remedy, since third persons who merely summon medical assistance are not liable therefor in the absence of a special agreement. *Starrett v. Miley*, 79 Ill.App. 658 (1899); *Crane v. Baudouine*, 55NY256 (1873).

Duty Toward Those Liable to Exposure to an Infectious Disease—Appellants sued the two physicians in attendance on their married son for not telling them that typhoid fever was an infectious disease and for advising them to take him home and put him among the younger children. As a result, both of the appellants and three of their minor children contracted typhoid fever, of which one of the children died. Held, although the complaint was insufficient here because of failure to show that the negligence was the proximate cause of the injury, a duty rests on a physician attending a patient with a contagious or infectious disease to exercise reasonable care to advise members of the family and others liable to be exposed of the nature of the disease and the danger of exposure. *Davis v. Rodman*, 227SW612 (Ark. 1921).

A legal duty resting on the defendant to use care or skill is an essential element of actionable negligence. *Curtin v. Somerset*, 140PaSt70. The leading effort to formulate this duty found in *Heaven v. Pender*, LR.11QBD503 (1883), is broad

in its language. The court there said: "Whenever one person is by circumstances placed in such a position with regard to another, that everyone of ordinary sense, who did think, would at once recognize that if he did not use ordinary care and skill in his own conduct with regard to those circumstances he would cause danger of injury to the person or property of the other, a duty arises to use ordinary care and skill to avoid such danger." Although the courts have often quoted this rule, they have, in general, held that there are but two classes in which a legal duty arises: First, anyone in the exercise of his own legal rights is bound to use ordinary care not to injure others, *Colchester v. Brooke*, 7Adolphus & Ellis NS377; second, anyone undertaking to do something for another whether by express contract or otherwise, must act with due care. *Black v. N. Y., N. H., and Hartford Ry. Co.*, 193Mass448 (1907). Although the principal case is within neither of these two well-established classes it involves a probably not unreasonable application of the general rule in holding that a physician owes a legal duty not only to a patient or to one who has employed him to care for someone else but to all members of the family and others who are liable to be exposed to the disease. The only precedent for this decision is the recently decided case of *Skilling v. Allen*, 143Minn. (1919), where it was held that a doctor in telling plaintiff, who had employed him to care for his child, sick with scarlet fever, that there would be no danger from contagion in taking the child home from the hospital while peeling, was guilty of negligence. Although the court talks about the contractual duty of the defendant to the parents who had employed him, the case is decided on the grounds of tort liability.

—Abstracted from 19 Mich. Law. Review 885, June, 1921.

Oral Immunization to Colds

For the last two winters, investigators have been studying the efficacy of an orally administered heterophile antigen vaccine in reducing the incidence of the common cold. The strains of common respiratory organisms used in the vaccine were selected for heterophile content and ability to resist the effects of gastrointestinal secretions. The bacterial cultures were sterilized and the bacteria separated, absorbed on starch, dried and finally placed in capsules. The organisms contained in each capsule were: pneumococci, 25 billion; *Hemophilus influenzae*, 5 billion; streptococci, 15 billion, and *Micrococcus catarrhalis*, 5 billion. The capsules were administered on an empty stomach daily during the first week and thereafter once or twice a week during the season. The effectiveness seems to have been judged by the average number of colds occurring in the vaccinated group when compared with their average during the preceding three years and with "controls" not taking the vaccine. In the winter of 1933-1934, 1,036 persons were included in the experiment, of which number 500 were given the vaccine. In the succeeding winter 445 were given the vaccine and 469 others served as "controls." The statistics of the second year showed a decrease of 70 per cent in the average number of colds in the vaccinated group as compared with a decrease of 26.3 per cent in the "control" group. Aside from the theoretical objections to oral vaccination for colds, many of which are obvious, there are some specific reasons against the acceptance of this work as adequately controlled. For example, the group taken as controls had, in all instances previous to the experiment, a lower average number of colds per season than the vaccinated group. This factor alone does much to invalidate the control group. Furthermore, in view of the known factors of age, exposure and tremendous variation in colds from season to season and in different locations, any yearly variation in cold morbidity in one location or in small groups is of small utility as scientific evidence. The reports of the therapeutic value of orally administered "cold" vaccines are hardly convincing.—*Jour. A. M. A.*, Sept. 7, 1935.

*Mr. Purdy is a member of the firm, Douglas, Barbour, Desenberg and Purdy, attorneys for the Executive Board of Medical Defense, Michigan State Medical Society.

DEPARTMENT OF SOCIETY ACTIVITY

C. T. EKLUND, M.D., Secretary

"AFFLICTED CHILDREN" AND "FILTER BOARDS"

The true power and solidarity of the Michigan State Medical Society has had an excellent test and been beautifully demonstrated. By December 11 every county but two had reported that medical examining boards had been chosen and were ready to work. Councilors and members of the Public Relations Committee went into action magnificently and attained their objective completely according to schedule. This they did in many instances at considerable personal sacrifice, many times making long trips over icy roads. The officers and the entire membership of the Society are glad to acknowledge a debt of gratitude to the several Councilors and especially to Dr. Foster and his committee.

For a time it looked as though the applecart might be upset by our friends, the Hospital Administrators. The representatives on the 9 man board from the Michigan Hospital Association had some misgivings about the medical examining boards and wanted to recede from their position of coöperation. They felt that it would be more practicable in some instances to have a separate "medical filter" in each hospital. This problem was thoroughly discussed at a meeting in Lansing on December 18, presided over by Judge Frank L. McAvinchey, of Genesee County. Probate Judges Ruth Thompson and Severance were also there representing the Probate Judges' Association of Michigan. For the Michigan Hospital Association, there was Dr. W. L. Babcock, of Detroit, Dr. Don Morrill, of Grand Rapids, and Dr. W. L. Quinnell, of Highland Park, and for the Michigan State Medical Society, Dr. Henry Cook, Dr. J. E. McIntyre and Wm. J. Burns.

Out of this discussion came a specific recommendation applicable to Wayne County calling for a plan to be worked out in detail by collaboration between representatives of the Wayne County Medical Society and the Detroit District Hospital Council. For the rest of the state, the principle of a coun-

ty medical examining board was recognized, the personnel thereof to have staff membership in an approved hospital as well as membership in the County Medical Society and to be as cosmopolitan a group as possible as to specialties and as to social viewpoint.

The Crippled Children Commission has not seen fit to approve reinstatement of Schedule "A" providing payment by the state for medical and surgical fees for services rendered afflicted children. On December 11 your Executive Committee entertained four members of the Crippled Children Commission at dinner and discussed with them at length during the evening the many ramifications of this perplexing problem. The Commission members, to a man, believed that such services should be paid for; that bills for such services are as much a liability of the state as are bills for hospital facilities afforded these patients; they not only believed in the fundamental right of this principle, but expressed their personal hope and desire to authorize such payments.

They gave assent by silence to the statement that the Legislature, which in its wisdom had enacted this legislation, knows less about the problems of the care of afflicted children than does the Michigan State Medical Society and the Crippled Children Commission. They also recognized as probably true the statement that the State of Michigan will have an income for 1935 of upwards of \$200,000,000.00, a figure considerably in excess of the fondest expectations of state government officials. They agreed that the "filter" system as promulgated by the Committee of Nine is at the present time the most ideal mechanism for the control of commitments under this Act.

So far will the Crippled Children Commission go, but no farther. In the face of the specific prohibition against overdrafts they refuse to take the final step of reinstating Schedule "A." Since its inception the Crippled Children Commission has always had a deficit, and in spite of the prohibition, will have one this year. This too,

they recognized as inevitable if the work of caring for crippled and afflicted children is to go on during the balance of the fiscal year.

The rapport which now exists between the Michigan State Medical Society and the CCC is something to protect jealously. Much has been accomplished thus far, not alone in setting up the "filter" system, but, less tangibly, a degree of good will has been placed to the credit of the State Society with the CCC and the Auditor General's office and other governmental authorities, which must not be jeopardized. At the present writing the Governor still holds out against a special session of the Legislature. It remains to be seen whether or not the pressure will become great enough to oblige the calling of the special session. Fortunately other questions of even more momentous economic import to the State may force the issue. In the meantime your Economics Committee is collecting much valuable data and will be prepared when the time comes, for the first time in the history of the Michigan State Medical Society, to present facts and figures to support its recommendations.

The Economics Committee has delegated the task of obtaining this information to a sub-committee headed by Dr. Stanley Insley, of Detroit, and at the present time the committee has a Mr. Walter McPherson collecting reams of pertinent facts and figures from the records of the Auditor General's office. Photostat copies of tabulations will be in the hands of the sub-committee by January 1, in ample time to compute plenty of figures for the Legislature.

COUNTY SECRETARIES, ATTENTION!

The annual conference of county secretaries will be held at the Olds Hotel in Lansing on Sunday, January 26, at 10 A. M. Every possible effort is being made to have this conference of maximum benefit to the County Society. Mark this date on your calendar and plan now to be there all day. It will be worth while. The usual mileage rates will be paid to each secretary in attendance. County Society presidents and any others interested are also cordially invited.

COLLECTION AGENCIES

This is the time of year when solicitors from collection agencies start invading the offices of physicians to get lists of accounts for collection. BEWARE. Particularly beware of agencies from outside your city. Before you turn over any accounts or sign any contract INVESTIGATE, either through the Better Business Bureau of the city from which the collector comes, or through the Bureau of Medical Economics of the American Medical Association, or through bank channels. Report any irregular agency to the Secretary in order that he may pass the information along through his monthly confidential letter.

WPA MEDICAL CARE

The monthly stipend of WPA workers is admittedly inadequate to provide medical care. In one county of the state an enlightened Emergency Relief Administration recognizes this and has approved the following principle: Home or office attendance for minor ailments requiring one or a few treatments must be paid for by the WPA worker. In event of an illness in the worker's family of some magnitude, as for instance, a confinement case, or a fracture, or pneumonia, supplemental care is given upon application to the Emergency Relief Administration. This applies where the needs budget for the family is within 15 per cent of the income from WPA. Where the difference is greater, less consideration is given, but each case is considered on its merits. Take this up with your local Emergency Relief Commission if you are not similarly organized.

RÉSUMÉ OF SOCIAL SECURITY ACT

By WM. J. BURNS, Executive Secretary

Recommendations of Committee on Economic Security to President Roosevelt (January 15, 1935):

1. Employment Assurance.
2. Unemployment Compensation.
3. Old Age Security (three kinds).
4. Security for Children.
5. Risks Arising out of Ill Health (two phases, one being health insurance).
6. Residual Relief.

Legislative results: (A) Enactment by Congress of WPA (\$4,000,000,000) and of Relief Appropriation (\$880,000,000) gave Employment Assurance, and Residual Relief. (B) The Social Security Act (enacted August 14, 1935) gave: Unemployment Compensation, Old Age Security, Security for Chil-

dren, Aid to the Blind, Vocational Rehabilitation, and Extension of Public-Health Services. (Congress adjourned August 26, 1935, without appropriating the funds authorized in the Act and indicated in following explanation.)

Explanation of *Unemployment Compensation*: A State project; U. S. provides Federal payroll tax on all employers of eight or more (with certain exceptions). Beginning January 1, 1936, tax is 1 per cent in 1936, 2 per cent in 1937, 3 per cent in 1938, and thereafter. States passing Unemployment Insurance Acts may draw from Unemployment Trust Fund of U. S. Treasury. U. S. appropriated \$49,000,000 a year. Not strictly a federal unemployment insurance act, but a fund to put pressure on states to pass such laws.

Explanation of *Old Age Security*: Title I.—Non-contributory Old Age Pensions: Grants to states to give pensions to old people now in need. U. S. pays half up to \$15 per month plus 5 per cent for State administrative purposes. U. S. appropriates \$49,750,000 per year. Title II.—Old Age Insurance, Compulsory Contributory Annuities; U. S. project (not State). Equal tax against employers and employees making less than \$250 per month—1 per cent in 1937 to 3 per cent in 1949 and thereafter. Age sixty-five years. Benefits from \$10 to \$85 per month beginning in 1942. (No provision in law for voluntary contributory annuities.)

Explanation of *Security for Children*: (a) Grants to states to assist in meeting the costs of aid to dependent children (mothers' pensions). U. S. appropriates \$24,750,000 this year—sufficient sum thereafter. U. S. pays one-third of State payments. (b) Grants to States to assist in meeting the costs of Maternal and Child Health Services. (Under Children's Bureau of Department of Labor.) U. S. appropriates \$3,800,000 annually. Rural areas to strengthen health services to mothers and children and extend maternity and nursing services. (c) Grants to States to assist in meeting the costs of services for Crippled Children. (Under Children's Bureau of Department of Labor.) U. S. appropriates \$2,850,000 annually. Medical care and other services. U. S. pays one-half of States' cost. (d) Grants to States to assist in meeting the costs of Child-Welfare Services. (Under Children's Bureau of Department of Labor.) U. S. appropriates \$1,500,000 annually. Welfare services in rural areas.

Explanation of *Aid to the Blind*: U. S. appropriates \$3,000,000 for 1936—sufficient sum thereafter—to give States one half of total sum expended for each blind person, not to exceed \$15 per month (plus 5 per cent for State administrative purposes). Blind receiving old age assistance are excluded.

Explanation of *Vocational Rehabilitation*: U. S. appropriates \$841,000 for 1936-1937 and \$1,938,000 annually thereafter, aid for rehabilitation of physically disabled. (Under Office of Education, Department of Interior.)

Explanation of *Extension of Public-Health Services*: U. S. appropriates \$8,000,000 annually as aid to State and local health services (under U. S. Public Health Service) for extending health services and to assist in maintaining adequate public health programs—"the entire amount is intended to be used for the prevention of preventable sickness." (In addition, \$2,000,000 is given to U. S. P. H. S. for investigation of diseases national in character.)

A United States Social Security Board of three is created to administer the Act and to make further investigations.

It is to be noted that the above legislation carries out almost exactly the recommendations of the President's Committee on Economic Security (excepting health insurance, which is still being studied by the Social Security Board).

COUNCIL AND COMMITTEE MEETINGS

1. Special Committee on Crippled-Afflicted Child Laws—Tuesday-Wednesday, October 29-30, House of Representatives Chamber, Lansing.
2. Committee on Maternal Welfare—Sunday, November 24, Olds Hotel, Lansing.
3. Committee on Preventive Medicine—Monday, December 9, Olds Hotel, Lansing.
4. Executive Committee of The Council—Wednesday, December 11, Statler Hotel, Detroit.
5. Contact Committee with Michigan Crippled Children Commission—Thursday, December 12, Statler Hotel, Detroit.
6. Special Committee on Crippled-Afflicted Child Laws—Wednesday, December 18, Olds Hotel, Lansing.
7. Public Relations Committee—Sunday, December 22, Olds Hotel, Lansing.
8. Legislative Committee—Wednesday, January 8, 1936, Wayne County Medical Society Bldg., Detroit.
9. The Council (Annual Meeting)—Wednesday and Thursday, January 15-16, 1936, Statler Hotel, Detroit.
10. Annual Secretaries Conference—Sunday, January 26, 1936, Olds Hotel, Lansing.

MINUTES OF THE MEETING OF THE EXECUTIVE COMMITTEE OF THE COUNCIL

Detroit, Wednesday, December 11, 1935

1. *Roll Call*.—The Executive Committee of The Council convened in the Judge Woodward Room, Statler Hotel, Detroit, at 3:15 P. M., December 11, 1935. Dr. Henry Cook, Chairman, called the meeting to order. Present: Councilors Henry Cook of Flint, A. S. Brunk and H. R. Carstens of Detroit, C. E. Boys of Kalamazoo, T. F. Heavenrich of Port Huron, and Frank E. Reeder of Flint. Also present Secretary C. T. Ekelund of Pontiac, Ralph H. Pino, S. W. Insley, L. O. Geib, and H. A. Luce of Detroit; also Attorney Clayton C. Purdy of Detroit, and Executive Secretary Wm. J. Burns.

2. *Approval of Minutes*.—The minutes of meeting of November 13, 1935, were read and approved. Secretary Ekelund reported that Dr. John A. Wessinger chooses to remain an active member of the M.S.M.S.

3a. *Office Lease*.—The Executive Secretary reported on office lease with the R. E. Olds Company which extended same from one to two years. Motion of Drs. Carstens-Brunk that the extended lease for two years be approved. Carried unanimously.

3b. *Practice of Medicine*.—Attorney Purdy of Mr. Barbour's office gave a report on the status of litigation regarding practice of medicine by osteopaths.

3c. *Integration of Filter System*.—A report on the progress of the Councilors' and Public Relations Committee's integration program was presented by the Executive Secretary. Drs. Brunk and Carstens reported on progress in Wayne County. It was suggested that letters to key-men should go to them direct and not through the Councilors. Dr. Cook presented the name of Dr. R. L. Wade of Coldwater as Councilor pro tem. in Third District to serve during the absence of Dr. Geo. C. Hafford, who is ill. Motion of Dr. Boys-Brunk that this appointment be ratified. Carried unanimously.

The Executive Committee approved the report on all Councilor District meetings and congratulated the Councilors and Public Relations Committee on their excellent work.

A letter proposed to be sent by President Penberthy to presidents, secretaries and editors of all

county medical societies was read and approved by the Executive Committee with the suggestion that a paragraph be inserted urging county medical societies to elect workers as officers and delegates, and to send their lists of new officers to the Executive Office as promptly as possible.

3d. *Stenotype Bill*.—The bill from the Master Reporting Company was discussed and correspondence read. Motion of Drs. Brunk-Boys that this bill of \$227.01 be allowed. Carried unanimously.

3e. *Goiter Committee*.—Dr. Carstens reported receipt of a letter and literature from Dr. E. B. Miner of the Goiter Committee. This Committee has been in existence 13 years, has cost the State Society nothing, and now requests financial aid. Full discussion. Motion of Drs. Carstens-Heavenrich that the expenses of the Goiter Committee be paid in an amount not to exceed \$100. Carried unanimously.

3f. *Social Security Act*.—Dr. Geib read the minutes of the meeting of the Preventive Medicine Committee held December 9, 1935, containing various recommendations to the Executive Committee, (I) The Committee urged that the organization of county health units be encouraged throughout the State; only county health units can participate in the funds to be made available under the Social Security Act. Discussion. Motion of Drs. Brunk-Reeder that the Committee on Preventive Medicine outline its plans for the integration of county health units to the Public Relations Committee which, after approval by the Executive Committee and the PRC, could sell this idea throughout the State. Carried unanimously. Dr. Geib stated he would develop these plans. (II) Relative to the motion of the Committee on Preventive Medicine that the State Health Commissioner be requested to set aside from the Social Security Act funds sufficient to employ and maintain a medical coordinator and staff to visit different counties and teach the technic of different tests to physicians: Motion of Drs. Carstens-Reeder that the Executive Secretary supply full information to Dr. Cook who will contact Dr. Slemons. Carried unanimously. (III) Relative to the Committee's suggestion on tuberculosis work: Motion of Drs. Carstens-Reeder that the Executive Secretary supply full information to Dr. Cook who will contact Dr. Slemons. Carried unanimously.

4. *Committee on Economics*.—Chairman Pino explained the four subcommittees proposed for the Committee on Economics: Subcommittees on Postgraduate Education, on Medical Relief, on Industrial Medicine, on Hospital Insurance. Motion of Drs. Brunk that these subcommittees be approved, for study purposes only. Carried unanimously. Dr. Carstens asked Drs. Pino and Insley to present their tentative expenditures for 1936 at an early date, for inclusion in the budget.

5. *Survey of Afflicted-Crippled Child Costs*.—Dr. Insley, chairman of the Subcommittee on Relief Medicine, Committee on Economics, presented three matters. (I) Survey of fees for SERA special services throughout the State: Dr. Insley read a letter proposed to be sent, with questionnaire, to secretaries of county medical societies. He presented lists of typical special services. Motion of Drs. Boys-Heavenrich that the letter be approved as read and disseminated. Carried unanimously. (II) Dr. Insley reported on the survey of the afflicted-crippled child costs, stating that it was necessary to employ a full time man to work on the State's books. Mr. Walter W. McPherson, experienced in this type of work, was available, and could dig out the required information. Motion of Drs. Brunk-Heavenrich that the bill for this work be allowed, same to be charged to the appropriation of the Committee on Economics. Carried unanimously. It was suggested that Dr. Insley furnish information on this work to the Legislative Committee as the survey progresses.

(III) Dr. Insley stated that the cost of the afflicted adult administration should be ascertained, and recommended that Mr. McPherson go into this work after completing his survey of the crippled child and the afflicted child. The Executive Committee instructed Dr. Insley to continue his survey as he recommended, insofar as the appropriation of the Committee on Economics allowed, and to bring in recommendations for any further costs to the Budget Committee for submission to The Council in January.

6. *Cancer Committee*.—The request of the Cancer Committee for permission to utilize its unexpended credit balance of \$121.15 to prepare from four to six duplicate sets of lantern slides to be used for education purposes, was discussed. Motion of Drs. Heavenrich-Boys that this matter be laid on the table until the January meeting of The Council. Carried unanimously.

7. *Auditing*.—The annual audit of the books by Ernst & Ernst of Grand Rapids was discussed, and the Executive Secretary was instructed to negotiate with this concern and others.

8. *Medical Relief*.—Secretary Ekelund read the answer of Wm. Haber, SERA Administrator, to the Resolution of the M.S.M.S. Committee on Economics, which resolution had been presented to the SERA on December 6, 1935. Dr. Haber stated there would be no change in basic procedures without consulting the M.S.M.S. Dr. Cook suggested that the M.S.M.S. Committee should contact the Governor, the State Administrative Board, etc., and offer help in solving outdoor relief medical problems and WPA medical care. Motion of Drs. Boys-Heavenrich that the Executive Committee approve such contacts as above outlined, same to be made by the Special Contact Committee to Government Agencies and Allied Groups. Carried unanimously.

9. *Secretary's Letter*.—The Executive Committee of The Council approved sending the Secretary's Letter to every member of the Michigan State Medical Society three or four times per annum.

10. *Section on Radiology*.—Dr. Cook presented the matter of officers of the Radiological Society being made officers of the Michigan State Medical Society Section on Radiology, which was approved on motion of Drs. Carstens-Boys. Carried unanimously.

11. *Annual Meeting of The Council*.—Motion of Drs. Carstens-Boys that the Annual Meeting be held in Detroit beginning Wednesday, January 15, 1936, 2:00 p. m., and continuing Thursday morning and afternoon, January 16, 1936, as necessary. Carried unanimously.

12. *Secretary's Correspondence*.—Dr. Ekelund presented various communications for the information of the Executive Committee; appropriate action was directed in each case.

13. *Recess*.—At 6:35 p. m., the meeting was adjourned to 7:30 p. m.

Joint Meeting of the Michigan Crippled Children Commission and the Executive Committee of the Council, M.S.M.S., Detroit, December 11, 1935

1. *Roll Call*.—The meeting was called to order in the Judge Woodward Room, Statler Hotel, Detroit at 8:50 p. m. Present were Commissioners H. E. Van de Walker, Mrs. L. James Bulkley, Dr. H. B. Fenech, and Jos. Schnitzler, with Harry H. Howett, Secretary; Drs. Henry Cook, A. S. Brunk, C. E. Boys, H. R. Carstens, T. F. Heavenrich, F. E. Reeder, C. T. Ekelund, W. A. Hyland, J. H. Dempster, H. A. Luce, F. H. Purcell, S. W. Insley, R. H. Pino, E. R. Witwer, and Executive Secretary Wm. J. Burns.

2. Afflicted-Crippled Child Laws

(a) Dr. Cook called upon the Executive Secretary to make a report on the progress of the filter sys-

tem integration; upon Dr. Insley for a report on the survey of the crippled and afflicted child laws' costs; upon Dr. Luce to differentiate between the afflicted and the crippled child, showing the importance of each; upon Dr. Witwer for the presentation of the radiologists' viewpoint. Dr. Cook explained the advantages of the revival of fee schedules for medical care of afflicted children and crippled children, which was discussed by Drs. Ekelund, Purcell, Chairman Van de Walker, Mr. Schnitzler, Dr. Fenech, Mrs. Bulkley, Dr. Carstens, Dr. Heavenrich, and others. The medical viewpoint was fully explained to and understood by the Commission. The four members present, however, were loath to revive the fee schedules for the payment of physicians until money for this purpose was either allocated by the State Administrative Board, or appropriated by the Legislature in special session; they felt they would be going beyond the law if they acted otherwise.

2b. *Medical Societies to be Ignored?*—The suggestion made to the Michigan Hospital Association by a certain hospital superintendent, that the Crippled Children Commission work only through the Michigan Hospital Association, thus ignoring the Michigan State Medical Society and the county medical societies—was read and fully discussed. This matter is on the agenda of the Commission meeting of December 12. The consensus of opinion was that all groups must work harmoniously together, in the interests of the afflicted and crippled children.

2c. *Fee for Medical Examinations.*—A letter asking information about the three dollar fee for examinations was read. Mr. Howett explained that this fee was being paid where judges are allowing same, as the appropriated budgetary item is not exhausted.

2d. *Social Security Act.*—Mr. Howett explained the two clauses in the Social Security Act applying to crippled children: (I) when a plan is set up by the Commission and approved by the Children's Bureau at Washington, \$20,000 will be allocated to each state, to be matched by said state; (II) any additional moneys will be allocated on the basis of need with special reference to children in rural areas. The Commission's plan purposes to use the grants for rural cases, and the anticipated sums were \$75,000 for hospitalization and \$4,500 for administration.

2e. *Thanks.*—Dr. Cook thanked the members of the Crippled Children Commission for this opportunity to present the views of the medical profession. The members of the Commission departed from the meeting at 11:35 p. m.

3. *WPA Health Survey.*—Dr. R. R. Spencer of the United States Public Health Service was introduced. He spoke of the WPA Health Survey (see Executive Committee minutes of October 9, 1935, item 12). After a number of questions had been asked, a motion was made by Drs. Brunk-Carstens that a committee be appointed to make further investigation of this United States Public Service Survey, and to report to The Council on January 15, 1936. Carried unanimously.

The Chair appointed to this committee: Drs. Brunk, Carstens, and Mr. Burns.

4. *Representatives to CCC Meeting.*—The matter of having representation of the medical profession at the Crippled Children Commission meeting of December 12, 1935, resulted in a motion of Drs. Brunk-Carstens that a committee be appointed by the Chair for this purpose. The motion was carried unanimously and the Chair requested the following to serve: Drs. Luce, Ekelund, Carstens, Brunk, Insley, and Mr. Burns.

5. The meeting was adjourned at 12:05 a. m.

MINUTES OF MEETING OF COMMITTEE ON ECONOMICS

Lansing, Wednesday, November 20, 1935

1. The meeting was called to order by Dr. Ralph H. Pino, chairman, in the Olds Tower, Lansing, at 2:30 p. m. Present were: Drs. Pino of Detroit, F. A. Baker of Pontiac, H. F. Becker of Battle Creek, S. W. Insley of Detroit, G. A. Seybold of Jackson, and W. H. Marshall of Flint, Advisor to the Committee. Also present were: President Grover C. Penberthy of Detroit, Chairman of The Council Henry Cook of Flint, Secretary C. T. Ekelund of Pontiac, and Executive Secretary Wm. J. Burns. Absent: Drs. E. I. Carr of Lansing and Ferris Smith of Grand Rapids.

2. The Chairman spoke of the good work done by last year's Committee which truly deserved the sincere appreciation and thanks voted it by the House of Delegates.

3. The matter of Relief Medicine, and the report of Dr. Insley's Sub-Committee on "Survey of Medical Relief in 10 Counties, Michigan, 1934," was presented by Dr. Insley. It was the consensus of opinion that SERA and WPA medical care should be placed on the same business-like basis as medical care supplied to afflicted-crippled indigents; that due to recent surveys, figures and statistics are available to back up medical claims. Dr. Ekelund presented a resolution covering the provision of medical care to employables and unemployables on relief. After full discussion, motion was made by Drs. Insley and Baker that the resolution be adopted and be submitted to the proper authorities. Carried unanimously.

The matter of ascertaining fees for *special services* rendered SERA patients (see pages 715-716-732, November, 1935, Journal) was referred to the Sub-committee on Relief Medicine. This Committee will send a questionnaire to every county medical society to obtain this information.

The Sub-committee on Relief Medicine was also requested to send a letter of transmittal, advising SERA officials regarding the action of the Michigan State Medical Society House of Delegates on the "Survey of Medical Relief in 10 Counties, Michigan, 1934."

4. Dr. Ekelund presented recommendations for a study of the cost and administration of the Crippled-Afflicted Child Laws, as well as a study of the SERA-WPA future plans, in order to present factual data to the next Legislature. (Some of these data are in the full report of the above mentioned Survey of Medical Relief in ten counties.) Motion of Drs. Baker-Becker that this study be referred to the Sub-committee on Relief Medicine for consideration and action. Carried unanimously.

5. Regarding the Postgraduate program for 1935-36 (See pages 714-715-732 of November, 1935, Journal); motion of Drs. Insley-Becker that this Committee on Postgraduate work and its studies be continued.

6. The question of the Committee on Economics making a study of industrial medicine was discussed, and on motion of Drs. Insley-Seybold was referred to Dr. Baker, as chairman of a Sub-committee on this subject, to study same and report back to the Committee on Economics. Dr. Baker was authorized to appoint the members of this sub-committee. Carried unanimously.

7. The question of the Committee on Economics making a study of group hospitalization was discussed, and on motion of Drs. Baker-Seybold, was referred to Dr. Becker as Chairman of a Sub-committee on this subject, to study same and report back to the Committee on Economics. Dr. Becker was authorized to appoint the members of this

sub-committee. Carried unanimously. Suggestions for this sub-committee: Define what is hospitalization; should hospitals sell medical service? get California Supreme Court Decision on this matter; if a group hospital plan is an insurance contract, what amount must be deposited with the State Treasurer as security for any liability?

8. Dr. Cook presented a diagram showing how the Committee on Economics may be aided by the Public Relations Committee of the Michigan State Medical Society in the integration of any program.

9. The Executive Secretary was requested to see Dr. Wm. Haber relative to FERA supplemental care to WPA workers, and other allied subjects.

10. The meeting was adjourned at 4:30 p. m., after the Chair had thanked all for their attendance and helpful suggestions.

MINUTES OF MEETING OF LEGISLATIVE COMMITTEE

Detroit, December 4, 1935

1. The meeting was called to order by Dr. H. H. Cummings, chairman, at 6:50 p. m. in the Club Rooms of the Wayne County Medical Society, Detroit. Present were: Drs. Cummings of Ann Arbor; F. B. Burke, Detroit; Henry Cook, Flint; L. J. Gariepy, Detroit; and C. F. Snapp of Grand Rapids. Also present Secretary C. T. Ekelund of Pontiac, Treasurer Wm. A. Hyland of Grand Rapids, Councilor A. S. Brunk of Detroit, and Executive Secretary Wm. J. Burns. Absent: Drs. L. G. Christian of Lansing and H. E. Perry of Newberry.

2. The minutes of the meeting of Nov. 7, 1935, were read and approved.

3. *Unfinished business*—

(a) Dr. Cook reported on the integration program of the Public Relations Committee which met with the favor of the Legislative Committee.

(b) The Attorney General's opinion on the question, "What constitutes, from a legal point of view, medical practice in the State of Michigan?" was read to the Committee, and copy of same was ordered mailed to the Policy Committee of the Wayne County Medical Society, who had asked for this information.

4. *Reports of Subcommittees* on their studies of various matters were presented in detail and approved.

5. Regarding the Barbituric bill: Motion of Drs. Gariepy-Snapp that the Committee find out what the American Medical Association is doing or intends to do regarding this legislation. Motion carried.

6. The committee discussed complaint regarding blind advertising of physicians M.D. employed by jewelry stores, department stores, etc., to examine eyes. The matter was referred to the proper committee for investigation and action.

7. Other matters on the agenda were considered and given appropriate action.

8. The meeting was adjourned at 10:00 p. m. The chair thanked all for their attendance and advice, and set the tentative date of the next meeting for January 8, 1936.

MINUTES OF MEETING OF COMMITTEE ON PREVENTIVE MEDICINE

Lansing, December 9, 1935

1. The meeting was called to order by Dr. L. O. Geib, chairman, in the Olds Hotel, Lansing, Monday, December 9, 1935, at 6:45 p. m. Present were: Drs. Geib of Detroit, R. B. Harkness, Hastings; R. H. Holmes, Muskegon; J. J. O'Meara, Jackson; and Milton Shaw, Lansing; also Dr. C. C. Slemons, State

Health Commissioner; Dr. A. M. Campbell, Grand Rapids; Mr. Theo. J. Werle of Michigan Tuberculosis Association; Dr. Henry F. Vaughan, Detroit Health Commissioner; Dr. Bruce Douglass, Detroit; and Executive Secretary, Wm. J. Burns. Absent: Drs. A. L. Callery, Port Huron; A. L. LaBine, Houghton; R. M. McKean, Detroit.

2. The minutes of the last meeting were approved.

3. At the request of the Chair, Dr. Vaughan presented an analysis of the Social Security Act as passed by Congress August 14, 1935. Mr. Burns read a brief digest of this legislation. General discussion followed. Information given—Under this Act, Michigan would receive \$89,000 for Maternity Child Welfare; twelve states will receive \$800,000 and the balance of thirty-six states will get less than \$400,000 from the equalization fund of Social Security Act. Michigan not included in the equalization fund, so the Michigan Department of Health will not share in this fund of \$1,200,000; in Michigan, 40 counties have full-time county health units (the first was established in 1927), and forty-three counties have no county health units.

After full discussion, Dr. Slemons stated that almost all of the funds to be received by the State Department of Health would be used in this State to organize county health units, and once the unit is established it will be a law unto itself. The medical profession of each county must deal directly with the county health unit.

4. At its last two meetings, the House of Delegates of the Michigan State Medical Society approved this Committee's report recommending employment of a full time medical coordinator to visit the different counties and teach the technic of the different tests to physicians for use in their own practices. Motion of Drs. O'Meara-Holmes that this Committee recommend to the Executive Committee of The Council that it respectfully request the State Health Commissioner, in preparing his budget for the expenditure of funds obtained from the Federal Government under the Social Security Act, that an amount be set aside for the employment and necessary traveling and maintenance expense of a medical coordinator and staff to do this work in co-operation with the Committee on Preventive Medicine of the Michigan State Medical Society. Carried unanimously.

5. "Suggestions for Preventive Medicine Committee of the Michigan State Medical Society" were presented. Motion of Drs. Shaw-O'Meara that the recommendations on page 2 be adopted and referred to the Executive Committee of The Council. Carried unanimously.

Motion of Drs. Shaw-O'Meara that before the next meeting of the Committee on Preventive Medicine, the chairman appoint a sub-committee to draw up recommendations for transmission to county medical societies regarding county health units and methods of publicity, and attempt to have them adopted in their respective counties, and that a recommendation be made to Secretary Ekelund that he place on the program of his Secretaries Conference a qualified speaker to explain the advantages of such county health units. Carried unanimously.

6. A discussion on funds to be allocated for crippled children under the Social Security Act resulted in a request that the Executive Committee of The Council, at its joint meeting of December 11, inquire of the Michigan Crippled Children Commission just what is to be its program—how are the funds to be received by the Commission going to be expended? and if the State Society, through its Committee on Preventive Medicine, can cooperate to help make the Commission's program successful?

7. The meeting was adjourned at 9:10 p. m., and the Chair thanked all for their attendance and helpful suggestions.

COUNTY SOCIETIES

BAY COUNTY

The annual meeting of the Bay County Society was held Wednesday evening, December 11, at 7:00 o'clock at the Euclid Country Club. The members and guests numbering seventy-five were dinner guests of the retiring president, Dr. S. L. Ballard.

Among the guests present were: Drs. L. G. Christian, Lansing; I. W. Greene, Owosso; T. F. Andrews, Kalamazoo; R. H. Holmes, Muskegon; Claude Keyport, Grayling; Capt. H. L. Hoerns-meyer and Lieut. M. T. Mehl of the CCC service.

The society conferred the title of Dean upon Dr. John W. Hauxhurst, who has practised in Bay City for sixty years.

The election of officers resulted as follows: President, Dr. M. C. Miller, Auburn; president-elect, Dr. A. D. Allen, Bay City; secretary-treasurer, Dr. L. Fernald Foster, Bay City; delegate, Dr. L. Fernald Foster, Bay City; alternate delegate, Dr. S. L. Ballard, Bay City; Medico-Legal Committee member, Dr. E. A. Witwer, Bay City; Censors, Dr. V. H. Dumond, Chairman, Dr. R. N. Sherman and Dr. R. C. Perkins.

The following new members were elected: Dr. E. V. Thiehoff, Gladwin, and Dr. Harry Berman, Omer.

Following the meeting the members and guests enjoyed "open house" at Dr. Ballard's home.

L. FERNALD FOSTER, M.D., *Secretary*.

BERRIEN COUNTY

At our annual meeting held December 11, 1935, the following men were elected to fill offices in the Berrien County Medical Society:

Dr. R. Meader, New Buffalo—President
Dr. C. Emery, St. Joseph—Vice President
Dr. A. F. Bliesmer, St. Joseph—Secretary and Treasurer

Dr. R. Snowden, Buchanan—Delegate
Dr. D. Richmond, St. Joseph—Alternate.

CALHOUN COUNTY

At the annual meeting of the Calhoun Medical Society, held December 2, the following officers were elected: Dr. R. C. Winslow, president; Dr. C. W. Brainard, vice president; Dr. Wilfrid Haughey, secretary-treasurer; Dr. Harvey Hansen, delegate for two years; Dr. A. T. Hafford, delegate for one year.

All officers are of Battle Creek except Dr. Hafford, who lives in Albion.

WILFRID HAUGHEY, M.D., *Secretary*.

GRAND TRAVERSE-LEELANAU-BENZIE COUNTY

On Tuesday, December 3, 1935, twenty-two members of the Grand Traverse-Leelanau-Benzie County Medical Society sat down to a sumptuous banquet at the Park Place Hotel as guests of the president, Dr. J. G. Zimmerman.

A business session followed dinner. The secretary-treasurer's report for the past year was read, accepted and ordered placed on file.

The following officers were elected for the next year: President, J. G. Zimmerman, M.D., Traverse City; vice president, Dwight Goodrich, M.D., Traverse City; Secretary-treasurer, E. F. Sladek, M.D.,

Traverse City; medico-legal advisor, F. G. Schwartz, M.D., Traverse City.

A thorough discussion took place regarding the recommended proposals relative to the administration of the Afflicted Child Act, and the President was asked to appoint two committees: one, the Economics Committee, to confer with our Probate Judge relative to the delinquency of applicants under this Act; the other, the Medical Committee, which is to determine the urgency of any proposed corrective procedures, is to consist of five members, of whom three will always be on call. This Medical Committee also is to act as a Fracture Committee subject to consultation services for any member of our society in any fracture case and on a no-fee basis if conditions warrant it.

The speaker of the evening, Dr. F. H. Lashmet of Petoskey, then gave a thorough review of the various theories of the cause of edema and emphasized the modern treatment of this condition.

The rest of the evening was spent in the usual Traverse City style and the meeting adjourned at a late hour.

E. F. SLADEK, M.D., *Secretary*.

HURON-SANILAC COUNTY

The Huron-Sanilac County Medical Society met at Sandusky, December 5, with an attendance of twenty-five members. Guests of the Society were the Hon. Judge G. Paldy of Sanilac County, and Mr. Sweet, chairman of the Expenditure Committee of the Board of Supervisors of Sanilac County; also Dr. T. Heavenrich, Councilor of the Seventh District.

Dr. Webster, president of the Society, introduced Dr. Heavenrich, who spoke at length on the topic of the care of the indigent adult as well as the afflicted child. He laid before the members and guests all phases of the problem and discussed ways of correcting the abuses brought about under the present laws.

He plainly showed the county officials how their burdens, both financial and mental, could be eased, and in his arguments won the support of both officials and medical men. He stressed the fact that each county had its problems, which would have to be solved according to conditions existing, but made it very clear, that cost of indigent medical care could be reduced materially, and by so doing, the medical men could be paid a fee commensurate with the work done.

A round table discussion followed, in which Judge Paldy and Mr. Sweet, chairman of the Expenditure Committee, stated they would welcome the changes suggested and asked that proper committees be appointed to act with them.

The president appointed Drs. Harry Learmont of Crosswell, Dr. Kirker of Snover, and Dr. John Campbell of Brown City to act for Sanilac County. Huron County appointments made by Dr. W. Holdship of Uby included Dr. Holdship and Drs. Morden and Herrington of Bad Axe.

J. G. WEBSTER, M.D., *President*.

JACKSON COUNTY

At the annual Jackson County Medical Society meeting held December 17, 1935, the following men were elected to office: President, Dr. Chas. R. Dengler; president-elect, Dr. E. D. Crowley; secretary, Dr. H. W. Porter; treasurer, Dr. G. R. Bullen; editor of the Bulletin, Dr. H. W. Porter; Board of Directors—Dr. H. A. Brown for one year, Dr. H. L. Hurley for two years, and Dr. J. E. Ludwick for

COUNTY SOCIETIES

three years; delegates—Dr. Philip Riley and Dr. J. J. O'Meara.

Dr. Alter declined to run as secretary because he has his hands full as the chief of staff of W. A. Foote Hospital, which is undergoing a complete reorganization.

H. W. PORTER, M.D., *Secretary*.

KALAMAZOO ACADEMY OF MEDICINE

Officers of the Kalamazoo Academy of Medicine for 1936 are: President, W. R. Young, Lawton; first vice president, Hugo Aach, Kalamazoo; second vice president, O. D. Hudnutt, Plainwell; third vice president, G. H. Caldwell, Kalamazoo; secretary, F. M. Doyle, 1315 American National Bank Bldg., Kalamazoo; treasurer, J. G. Malone, Kalamazoo; councilor, C. E. Boys, Kalamazoo; librarian, Martin Patmos, Kalamazoo.

The Board of Censors includes the following: J. McCarthy, Kalamazoo, and I. W. Brown, Kalamazoo (terms expire 1936); R. J. Hubbell, Kalamazoo, and G. H. Caldwell, Kalamazoo (terms expire 1937); W. C. Huyser, Kalamazoo, and R. B. Fast, Kalamazoo (terms expire 1938).

Delegates to the State Society meeting are: F. T. Andrews, Kalamazoo (term expires 1936); R. G. Cook, Kalamazoo (term expires 1937); Chas. Ten Houten, Paw Paw (term expires 1938); alternate delegates; F. M. Boothby, Lawrence, H. H. Stryker, Kalamazoo, and W. R. Vaughan, Plainwell.

LAPEER COUNTY

The Lapeer County Medical Society held its regular annual meeting at noon, on December 12, 1935.

The election of officers resulted as follows: President, H. M. Best, Lapeer; vice president, D. J. McBride, North Branch; secretary-treasurer, Clark Dorland, Lapeer; delegate, D. J. O'Brien, Lapeer; alternate, H. M. Best, Lapeer.

The next meeting will be held on January 2, 1936, in the evening at the Hotel Barrett, Lapeer. Speakers will present the "New Deal." Doctors T. F. Heavenrich, Henry Cook and L. F. Foster will speak. The Judge of Probate and such supervisors as are available and suitable have been invited.

LUCE COUNTY

Luce County Medical Society held its meeting on Thursday, December 12, and elected the following officers: President, Dr. G. F. Swanson; vice president, Dr. C. B. Toms; secretary and treasurer, Dr. A. T. Rehn; delegate to Michigan State Medical Society, Dr. R. E. Spinks; alternate, Dr. A. T. Rehn.

A. T. REHN, M.D., *Secretary*.

MUSKEGON COUNTY

The Muskegon County Medical Society held its annual meeting, December 13, 1935, at the Muskegon County Sanatorium. Members were guests of the Director, Dr. F. Herbert Bartlett. Following a turkey dinner with all the "fixin's," some splendid reports by the various committee chairmen were presented.

Dr. Roy H. Holmes gave a discussion of the recent activities of the combined committees, relative to the affairs of the Crippled Children's Commission and their interpretation of the afflicted and crippled child's act. The Society was very much pleased, and not a little proud of the attitude taken by the local Judge of Probate, Honorable Ruth

Thompson, president of the Michigan Association of Probate Judges. She is taking an active interest in seeing that the physician is paid a fair fee for his services, the same as the purveyors of other necessities.

The Public Relations Committee has had a very busy year. This is the most active group in our organization and to them goes a large share of the credit for the advancement of our Society. They have the complete backing of every member in the Society.

The following officers were elected: President, C. M. Colignon; president-elect, C. B. Mandeville; secretary and treasurer, L. E. Holly; delegate to State Society, R. H. Holmes; alternate, L. E. Holly; medical legal advisor, G. L. LeFevre.

LELAND E. HOLLY, M.D., *Secretary*.

NORTHERN MICHIGAN SOCIETY

The regular meeting of the Northern Michigan Medical Society was held at the Perry Hotel, Petoskey, December 12, 1935. The meeting was called to order by President Mayne. Minutes of the last meeting were read and approved and correspondence was read. Councilor Van Leuven read the various letters he had received in regard to the Crippled and Afflicted Children's Act.

Motion was made and supported that this society send the prosecuting attorney of Emmet County a resolution favoring the full, vigorous and impartial prosecution of Mr. Born for the violation of the Medical Practice Act.

The following officers were elected for the coming year: President, Ralph Engle, Petoskey; vice president, Guy Conkle, Boyne City; secretary and treasurer, Ervin Brenner, East Jordan; delegate, Dr. Guy Conkle, Boyne City; alternate delegate, Gilbert Salt-entall, Charlevoix.

OAKLAND COUNTY

The annual meeting of the Oakland County Medical Society was held at Pontiac, Thursday evening, December 19. A wassail bowl and an excellent dinner preceded the meeting.

To officers for 1936 are: President, Dr. E. V. Howlett, Pontiac; president-elect, Dr. Palmer Sutton, Royal Oak; secretary, Dr. Chauncey G. Burke, Pontiac; treasurer, Dr. H. A. St. John, Pontiac.

The Board of Directors, including the president, president-elect and secretary, are Dr. G. A. Sherman, Pontiac, and Dr. J. S. Morrison, Royal Oak (terms expire, 1936); Dr. H. B. Barker, Pontiac, and Dr. Loren G. Sheffield, Pontiac (terms expire, 1937).

Delegates to the Michigan State Medical Society are Dr. Otto Beck, Birmingham, and Dr. Ernest Bauer, Hazel Park; alternates, Dr. Robert H. Baker, Pontiac, and Dr. A. V. Murtha, Pontiac.

O.M.C.O.R.O. COUNTY

The regular meeting of the O. M. C. O. R. O. County Medical Society was held at Grayling, December 13, 1935, for the purpose of election of officers. There were twelve members present.

Officers for 1936 are as follows: President, Dr. G. L. McKillop, Gaylord; vice president, Dr. C. H. Crandell, West Branch; secretary-treasurer, Dr. C. G. Clippert, Grayling; delegate, Dr. C. R. Keyport, Grayling; alternate, Dr. C. G. Clippert, Grayling.

The Public Relations Committee is composed of the following members: Ogemaw County, Dr. H. M. Jardine; Ostego County, Dr. F. Rifenberg; Montmorency, Dr. A. C. McKinnon; Roscommon, Dr. M. Martzowka; Oscoda County, Dr. F. W. Lee; Crawford County, Dr. C. R. Keyport.

C. G. CLIPPERT, M.D., *Secretary*.

ST. CLAIR COUNTY

The regular meeting of the St. Clair County Society was held at the Harrington Hotel, Port Huron, December 3, 1935.

The meeting was attended by thirty-five physicians, and several guests—the Probate Judge of St. Clair County, the Mayor of Port Huron, and the entire personnel of the Expenditure Committee of the Board of Supervisors of the county.

Dr. George Waters, presiding officer, opened the meeting by stating to our guests that its purpose was to show them that the medical men wished to help them solve the problem of medical relief for indigents. He felt if we helped them solve their problems, they, in turn, would help us solve ours; that in solving both problems, we felt we could assure them of lowered costs of operation and a material saving to the county. Further, it would tend to a return of the old relationship of family and family doctor.

Dr. Waters then called on Dr. Theodore Heavenrich, councilor of this district, to explain all that was being done by the State Society and what we hoped to do. He outlined various plans of operation conducted in other counties. He stressed the need of filtering those cases which should not be classed as indigents, as well as those in which medical or surgical care was not urgent, and could be postponed to a later date. He clearly set forth the fact that there are very few "chiselers," and that by cooperation we could eliminate them.

These remarks were followed by talks given by Judge Clair Black, of the Probate Court. His words clearly indicated that the court not only would welcome the help outlined, but begged for it. The judge was followed by the Mayor of Port Huron, Mr. George Harvey, who, as a member of the Board of Supervisors, also requested such advice and help. Every member of the Expenditure Committee agreed in all things suggested and their remarks were very pertinent to the subject.

It was clearly evident that all the officials present were in favor of our plan, to meet with them, and work in harmony on the problem. They stated further that they were of the opinion the fees now being paid were not sufficient, that the doctor was entitled to his pay for service just as others were.

The Public Relations Committee was requested to meet with the Probate Judge in a few days, and to follow that with a meeting with the Committee of Supervisors.

A great deal was accomplished at this meeting, the main thing being a bond of harmony between the supervisors and the men of medicine. Then, too, the doctor, himself, is beginning to realize that no one committee, alone, can work out these problems. Each and every member of the State Medical Society must do his portion, not waiting to be called on, but to volunteer to do his bit.

* * *

The annual meeting and election of officers was held at the Harrington Hotel, Tuesday, December 17, 1935. Twenty members and one guest, Dr. Englemann of St. Clair, were present. Vice president J. H. Burley was in the chair. The minutes of the preceding meeting were read and approved. Several communications were read and placed on file. The chairman of the Public Relations Committee made a brief report of several meetings, held with the Probate Judge and Expenditures and Health Committees of the County Board of Supervisors and told of the medical filter which had been set up to cooperate with those officials to eliminate indigents who did not require immediate medical and surgical treatment at county expense. Motion accepting the report was carried. The secretary-treasurer made his annual reports. It was moved and carried that as soon as the proper amendments

could be made to the Constitution and By-Laws, the vice president would be considered as the president-elect of the Society. Dr. C. F. Thomas stated that he would prepare and present to the next meeting of the Society such amendments.

The following officers were elected by acclamation: President, Dr. J. H. Burley; vice president, Dr. H. O. Brush, secretary-treasurer, Dr. G. M. Kesl; delegate to the State Society, Dr. A. L. Callery; alternate delegate, Dr. T. E. DeGurse; censor to succeed himself for three years, Dr. A. J. MacKenzie. A general discussion of committees, their functions and appointments then followed.

GEORGE M. KESL, M.D.,
Secretary-Treasurer.

WASHTENAW COUNTY

At a meeting of the Washtenaw County Medical Society, held on December 10, the following officers were elected for the year 1936. President, Norman F. Miller; vice president, Margaret Bell; secretary, John V. Fopeano; delegates, John Wessinger, Dean Myers, and John Sundwall; alternates, S. L. LaFever, H. B. Britton, and Warren E. Forsythe; censors, W. J. Wright, Lester Johnson, and W. M. Brace.

JOHN V. FOPEANO, M.D., *Secretary.*

WEXFORD SOCIETY

The officers of the Wexford Medical Society for 1936 are as follows: President, John Gruber, Cadillac; first vice president, E. A. McManus, Mesick; second vice president, J. F. Carrow, Marion; secretary and treasurer, B. A. Holm, Cadillac; delegate to State Convention, W. Joe Smith, Cadillac; alternate delegate, J. F. Carrow, Marion.

The Society, in its December meeting, approved the new arrangement for handling afflicted children. The following committees were chosen:

Wexford County: Medical Urgency Committee—Dr. W. J. Smith, chairman; Dr. L. E. Showalter, and Dr. B. A. Holm. Economic Necessity Committee—Dr. W. J. Smith, chairman, Dr. L. E. Showalter, and Dr. B. A. Holm.

Missaukee County: Dr. F. A. Torrey and Dr. Hubert Doudna.

BENTON A. HOLM, M.D., *Secretary.*

The Physical Characteristics of Diathermy And Short Wave Diathermy Machines

In their discussion of the two types of diathermy machines that are used at the present time to produce high frequency electric current which will pass through the tissues producing heat but no neuromuscular stimulation, Allan Hemingway and K. W. Stenstrom, Minneapolis (*Journal A. M. A.*, Nov. 2, 1935), refer to them as the spark gap diathermy machine and the vacuum tube diathermy machine. They assert that the newer method of heat therapy, namely, the short wave diathermy, is at present in an experimental stage. Much valuable research has been done to clarify the problems involved; at the same time there are in the literature some very confusing and misleading statements in regard to the merits of this form of therapy. For a good critical discussion they would recommend the recent article by Mortimer and Osborne. In particular, they would recommend that, owing to the lack of knowledge on many phases of this work and the indications of dangerous possibilities, the new machine be used with the utmost caution. On the other hand, conventional diathermy is an old established form of therapy about which much is known that has proved to be of definite clinical value.

JOUR. M.S.M.S.

WOMAN'S AUXILIARY

MRS. A. M. GIDDINGS, President, 22 Riverview Ave.,
Battle Creek
MRS. KENNETH LOWE, Secretary-Treasurer, 107 Elizabeth St., Battle Creek



MRS. A. M. GIDDINGS, Battle Creek
President, Woman's Auxiliary, Michigan State
Medical Society

Dear County Presidents and Members:

It was the pleasure of your president to be in attendance at the meeting of the executive board of the Woman's Auxiliary to the American Medical Association in Chicago, November 15. The all-day session was held at the Palmer House, with thirty members present. The Chicago auxiliary members were hostesses for the one o'clock luncheon held in the Victorian Room, at which time our national president, Mrs. R. N. Herbert, introduced the various guests.

The meeting, as a whole, proved to be both interesting and profitable and perhaps some of the information gained would prove of interest to our state members. There are thirty-eight states functioning in the organization at present. There are 450 county auxiliaries with a membership of 14,262. The south is the most fully organized, having a total of 5,000 members, and an organization of its own, known as the Southern Medical Auxiliary.

It is most encouraging to note that the officers and many of the committee chairmen of our national organization are young women. It should be a source of great pride that the affairs of this large association are in the hands of such capable and intelligent women as represented it at the board meeting in Chicago.

One of the most important issues decided at this meeting was the acceptance of the recommendation of the Treasurer, Mrs. Eben J. Carey, that the membership record system be changed, doing away with the use of the three-way receipt books of the local treasurers. A simpler, cheaper plan will be put into effect at once with materials and details sent out from the office of the national treasurer.

It was a recommendation, also, of the board that every state president visit each county auxiliary

during her term of office. I will attempt to do this. This month I had the pleasure of meeting the Saginaw and Bay County members at a joint meeting in Saginaw. Midland County doctors' wives were also present, and, although but a small group, they are interested in forming an auxiliary in their locality. One of the compensations of this office is this contact with friendly and interested members.

We are glad to add at this time, to our state organization, the unit known as the Auxiliary to the Northern Michigan Medical Society. This society includes four counties—Antrim, Charlevoix, Emmett and Cheboygan—and we are very happy to be represented in this portion of the lower peninsula. We welcome the new auxiliary with best wishes to its officers and members.

The local publicity chairmen are urged to send all items of interest of their organization, or of their members, to our State press chairman, Mrs. L. C. Harvie, 341 Brockway Place, Saginaw, Michigan; so that through these pages in the JOURNAL we may become better acquainted, and thus gain the strength through union which is necessary to carry out our work. Your president stands ready to help with any problems you may have—of membership, of activities, of public relations, et cetera.

With best wishes to all, I am

Sincerely,

(Signed) (Mrs. A. M.) LEAH M. GIDDINGS.

December 9, 1935.

Dear Auxiliary Members:

Your chairman of organization has been busy since the annual meeting at the "Soo."

We have sent out forty letters to County Medical Societies, where no Auxiliary has been organized, asking them if they wished one formed and we have had replies from a large number, most of them stating that it would be discussed at their December meeting, and we would then be notified as to their wishes.

We were very happy to discover that Luce County was ready to organize, and the necessary literature has been sent to Mrs. R. E. Spinks, of Newberry and we certainly wish them much success in their venture. If we can be of any future help, please let us know and we will do all we can.

Already, twenty counties are organized—of course, this means only thirteen auxiliaries, as some of the counties have combined.

If there are wives in counties where there are only a few doctors, who wish to belong to an auxiliary, it would be nice to let adjacent, organized counties know about this and perhaps they could affiliate. There are so many good reasons why we should be organized 100 per cent that we are hoping for big results along this line in 1935-1936.

Sincerely,

(Signed) (Mrs. J. A.) ZUELA B. McLANDRESS.

State Organization Chairman.

715 Court St.,
Saginaw, Mich.

County News and Officers for 1935-1936

Bay County—

President—Mrs. L. T. Foster, 1803 McKinley Ave., Bay City.

Secretary—Mrs. Kenneth Stuart, 302 Lafayette Ave., Bay City.

Treasurer—Mrs. H. M. Gale, Bay City.

Program—Mrs. R. C. Perkins, 2118 5th Ave., Bay City.

Hygeia and Press—(Taken care of by Secretary.)

Delegate—Mrs. A. L. Ziliak, Bay City.

Calhoun County—

President—Mrs. Wm. Dugan, 91 Sherman Road, Battle Creek.
 Vice president—Mrs. J. E. Cooper, 64 Garrison Ave., Battle Creek.
 Secretary—Mrs. Robert Fraser, 198 Fremont St., Battle Creek.
 Treasurer—Mrs. B. G. Holton, 94 Central St., Battle Creek.
 Program—Mrs. C. G. Wencke, 119 Frelinghuysen Ave., Battle Creek.
 Publicity—Mrs. W. O. Upson, 71 College St., Battle Creek.
 Hygeia—Mrs. Walter Martin, Battle Creek.

Eaton County—

President—Mrs. T. Wilensky, Eaton Rapids.
 Vice president—Mrs. C. A. Stimson, Eaton Rapids.
 Secretary—Mrs. K. A. Anderson, Charlotte.
 Treasurer—Mrs. P. Engle, Olivet.
 Program—Mrs. J. Lawther, Charlotte.
 Press—Mrs. D. V. Hargrave, Eaton Rapids.
 Hygeia—Mrs. B. Van Ark, Eaton Rapids.
 Legislative—Mrs. C. D. Huber, Charlotte.
 Public Relations—Mrs. A. G. Sheets, Eaton Rapids.

On November 21, the Eaton County Auxiliary met at the home of Mrs. Paul Engle, in Olivet, for a pot-luck supper. The fifteen members present answered roll call by giving a current event. A book report on "Psychology and Life," by Weatherhead, was very cleverly and interestingly given by Mrs. J. W. Davis, of Charlotte. Plans for the Christmas meeting were discussed.

Ingham County—

President—Mrs. H. B. Weinburgh, 620 Ardson Rd., Lansing.
 Secretary—Mrs. J. H. Albers, Lansing.
 Treasurer—Mrs. Horace L. French, 1620 W. Main St., Lansing.
 Legislative—Mrs. Cyrus Gardner, Lansing.
 Hygeia—Mrs. B. D. Niles, 726 W. Ionia St., Lansing.
 Delegates—Mrs. H. Wiley, Lansing, Mrs. L. G. Christian, Lansing.

Jackson County—

President—Mrs. M. N. Stewart, 508 Steward Ave., Jackson.
 Vice president—Mrs. E. F. Lewis, 748 Crescent Rd., Jackson.
 Secretary—Mrs. E. O. Leahy, 1826 Grovedale Ave., Jackson.
 Treasurer—Mrs. R. J. Hanna, 111 S. High St., Jackson.
 Program—Mrs. W. B. Anderson, 323 Homecrest Road, Jackson.
 Legislative—Mrs. J. C. Smith, 1114 W. Washington Ave., Jackson.
 Hygeia—Mrs. C. S. Clark, 1046 Fourth St., Jackson.
 Press—Mrs. E. D. Crowley, 408 Ellery St., Jackson.
 Public Relations—Mrs. G. C. Hicks, 1009 Wildwood, Jackson.

Mrs. George Pray was hostess to the Jackson County Auxiliary on Tuesday evening, November 19. Forty-three members and guests attended. During the business session, which followed the dinner, a copy of the Resolutions sent to Dr. Winter, on the death of his wife, was read. Two new members, Mrs. Myron Susskind and Mrs. R. H. Alter, were introduced.

Mrs. Warren Anderson, program chairman, introduced the speaker, Mrs. Myron Susskind, who gave a very interesting talk on Russia. She gave a short outline of Russian history, reading from the books of Tolstoi, Gorky and Dostoevsky, descriptions of

the lives of the serf, city proletarian and the intelligensia. She said, "Russia is rapidly changing from a Communistic government to a Socialistic order and that the country, being purely agricultural from its beginning, was changing into an industrial nation. Instead of shipping out its raw materials it is now utilizing everything at home. Students are being sent, at the expense of the government, to our universities so that they may learn our methods and go back and teach their own countrymen. Everything is under control of the government, or the three million followers of Stalin." In closing, the speaker stated that Russia is idealistic and only through this idealism can she carry on the vast undertakings she has mapped out. A general discussion followed.

The committee in charge of the dinner was headed by Mrs. T. E. Schmidt, assisted by Mesdames H. A. Brown, E. F. Lewis, R. J. Hanna, J. J. O'Meara and R. E. Newton.

Kalamazoo County—

President—Mrs. C. L. Bennett, 527 W. Lovell St., Kalamazoo.
 President-elect—Mrs. C. B. Fulkerson, 1631 Grand Ave., Kalamazoo.
 First vice president—Mrs. W. W. Lang, 204 Woodward Ave., Kalamazoo.
 Second vice president—Mrs. H. A. Regterink, 329 S. Rose St., Kalamazoo.
 Secretary—Mrs. Ralph Fast, 1625 Low Road, Kalamazoo.
 Treasurer—Mrs. J. G. Malone, Elm St., Kalamazoo.
 Press—Mrs. F. M. Doyle, 2415 So. Rose St., Kalamazoo.

Mrs. S. E. Andrews, Springhill Drive, was hostess to the members of the Woman's Auxiliary to the Kalamazoo Academy of Medicine for the November meeting held Tuesday, November 19. A bounteous cooperative dinner was enjoyed at 6:30 p. m., in the recreation room of the Andrews home by the twenty-seven members who attended the meeting. Chrysanthemums were used decoratively throughout the house.

It was decided again to follow the procedure adopted last year in furnishing gifts for the old people on the Community Tree list and each member was asked to bring her gift to the December meeting.

An announcement was made that Kalamazoo, through the Kellogg Foundation, has secured three hundred *Hygeia* subscriptions for use in the Van Buren County schools.

Miss Juliet Hubbard, of the Consumers Power Company, gave a talk on "Lighting," and Mrs. W. J. Williams, with the aid of excellent illustrations and maps, interestingly and instructively described the Italian-Ethiopian situation. An informal social time was enjoyed following the program.

Kent County—

President—Mrs. Henry J. Pyle, 525 Morris Ave. S. E., Grand Rapids.
 President-elect—Mrs. R. H. Denham, Grand Rapids.
 Secretary—Mrs. Wm. L. Betteson, 839 Pinecrest Ave., Grand Rapids.
 Treasurer—Mrs. Lynn A. Ferguson, 704 Prospect Ave. S. E., Grand Rapids.
 Program—Mrs. J. W. Regterink, 1302 Franklin St. S. E., Grand Rapids.
 Legislative—Mrs. A. V. Wenger, 132 Grand Ave. N. E., Grand Rapids.
 Hygeia—Mrs. A. R. Woodburne, 2430 Gilmour Ave. S. E., Grand Rapids.
 Press—Mrs. Thos. C. Irwin, 546 Wealthy St. S. E., Grand Rapids.

Northern Michigan Auxiliary—

President—Mrs. Guy Conkle, Boyne City.
Secretary—Mrs. Ralph Engle, Petosky.
Treasurer—Mrs. Carleton Dean, 109 Park Ave., Charlevoix.

Oakland County—

President—Mrs. Frank Gerls, 536 W. Huron St., Pontiac.
President-elect—Mrs. Fred Reed, Clawson.
Secretary—Mrs. Harry A. Sibley, 15 Matthews St., Pontiac.
Treasurer—Mrs. Chas. Neafie, 493 Orchard Lake Ave., Pontiac.
Social—Mrs. L. G. Rowley.
Program—Mrs. Vernon C. Abbott.
Legislative—Mrs. Harry Yoh.
Membership—Mrs. Leon Cobb.
Publicity—Mrs. E. V. Howlett.
Hygeia—Mrs. T. W. K. Hume.
Notification—Mrs. A. V. Murtha.

Ottawa County—

President—Mrs. C. E. Boone, Zeeland.
First vice president—Mrs. Wm. Westrate, Holland.
Second vice president—Mrs. R. TenHave, Grand Haven.
Secretary-Treasurer—Mrs. G. J. Kimme, Zeeland.
Ottawa County reports that they hold dinner meetings four or five times each year. A social evening follows the dinner and business session.

Saginaw County—

President—Mrs. Milton G. Butler, 1725 Cherry St., Saginaw.
Vice president—Mrs. Lloyd C. Harvie, 341 Brockway Place, Saginaw.
Secretary—Mrs. M. D. Ryan, 633 So. Washington Ave., Saginaw.
Treasurer—Mrs. W. J. O'Reilly, 832 Hoyt Ave., Saginaw.
Program—Mrs. Wm. P. Martzowka, 1206 Walnut St., Saginaw.
Legislative—Mrs. F. J. Cady, 20 W. Hannum Blvd., Saginaw.
Hygeia—Mrs. Dale E. Thomas, 221 N. Fayette Ave., Saginaw.
Public Relations—Mrs. W. H. Pickett, 1415 E. Genesee Ave., Saginaw.

Members of the Woman's Auxiliary to the Saginaw County Medical Society entertained members of the Bay County Auxiliary and the Midland County doctors' wives at a luncheon meeting, Thursday, November 21, at the Bancroft Hotel, Saginaw, at which they had as their guest speaker, Mrs. Allan M. Giddings, of Battle Creek, president of the State Auxiliary. Mrs. Giddings was accompanied to Saginaw by Mrs. John E. Cooper, vice president of the Calhoun County organization.

Attractively arranged bouquets of autumn flowers and orange-colored tapers were used as decorations for the luncheon tables and each place was marked with a small potted plant. Bridge was enjoyed after the program and luncheon and awards at contract were won by Mrs. L. F. Foster and Mrs. Wittwer, of Bay City, and at auction by Mrs. J. A. McLandress and Mrs. Victor Hill, of Saginaw.

Mrs. Giddings discussed the work of the auxiliaries throughout the state, emphasizing that of the younger members in the organization. She stressed the need of auxiliaries and the development of their practical side, and closer association through mutual interests. "It gives a balance and helps promote better means of combating misrepresentations in the medical profession," she said.

A trio composed of Mrs. J. A. McLandress, Mrs. A. R. Moon and Mrs. Fred Roecker, accompanied

by Mrs. B. W. Angell, entertained with two vocal numbers, "Medley of the Sunny South," and "Oh, Dear, What Can the Matter Be." Mrs. W. P. Martzowka, program chairman, introduced the guests.

Tuscola County—

President—Mrs. J. G. Maurer, Reese.
Vice president—Mrs. C. Y. Race, Caro.
Secretary—Mrs. Y. Hoffman, Vassar.
Treasurer—Mrs. Geo. Bates—Kingston.
Program—Mrs. J. Y. Redwine, Wahjamega.
Hygeia—Mrs. J. W. Hanby, Caro.

Wayne County—

President—Mrs. Frank Hartman, 7440 LaSalle Blvd., Detroit.
Vice President—Mrs. J. H. Dempster, 5761 Stanton Ave., Detroit.
Secretary, Corresponding—Mrs. Allan McDonald, 16579 Ohio, Detroit.
Treasurer—Mrs. Roger V. Walker, 1050 Parker Ave., Detroit.
Program—Mrs. Wm. O. Merrill, 136 McLean Ave., Detroit.
Press—Mrs. Milton A. Darling, 9116 Quincy, Detroit.
Public Relations—Mrs. F. T. Munson, 2325 Townsend, Detroit.
Hygeia—Mrs. Clifford Loranger, 888 Lakeshore Dr., Detroit.
Legislative—Mrs. Wm. H. Rieman, 7919 Kercheval Ave., Detroit.

The December meeting of the Woman's Auxiliary to the Wayne County Medical Society was held Friday, December 13, with Dr. Wm. J. Stapleton, Jr., director of the committee on Public Instruction, discussing "Radio Advertising." The customary tea followed.

On Saturday, December 14, occurred the annual Christmas party for younger children of Auxiliary members. Mrs. E. C. Baumgarten arranged a musical program which also included a magician. Santa Claus had a gift for each child and refreshments were served. Each guest had been requested to bring something for a needy child.

The second lecture of the series sponsored by the Study Group, "Men, Medicine and Mankind," was given Monday evening, December 16. Dr. Charles Godwin Jennings spoke on "William Budd and Typhoid Fever." These lectures are open to the public.

Plans are already under way for the Art Exhibit to be given March 8 to 13 under the direction of Mrs. James H. Dempster, Art Chairman. It has been decided to extend the scope of the exhibit to include art and craft handiwork of any doctor belonging to the Wayne County Medical Society and his immediate family, entries to be restricted in number according to available space.

A cordial invitation is extended to any Auxiliary member from outside Detroit to attend the Auxiliary meeting which occurs the second Friday of the month at 4421 Woodward Avenue.

(MRS. MILTON A.) WINOGENE E. DARLING,
Press Chairman.

The soul that harbours philosophy ought, by reason of its healthfulness, to render the body healthful, too. She should make her tranquillity and happiness to shine forth; should fashion the outward behaviour to her own mould, and so arm it with graceful assurance, an active and joyous carriage, a serene and contented countenance. The most evident sign of wisdom is a constant cheerfulness; her state is ever serene, like the things beyond the moon.—MONTAIGNE.

MICHIGAN'S DEPARTMENT OF HEALTH

C. C. SLEMONS, M.D., Dr.P.H., Commissioner
LANSING, MICHIGAN

The Annual Public Health Conference

The Fifteenth Annual Public Health Conference, held in Lansing on November 6, 7 and 8, had a registered attendance of 689, making it the largest thus far held. It exceeded by 249 the attendance of last year, which also set a record. In point of program and audience participation, it was equally successful. The conferences are sponsored jointly by the Michigan Department of Health and the Michigan Public Health Association. Health officers, public health nurses, sanitary officers and laboratory technicians make up the major portion of the audience, with an increasing number of laymen.

The State Organization for Public Health Nursing, the Michigan Association of Sanitarians and the Michigan Association of School Physicians held meetings in conjunction with the Conference.

Mental hygiene was the topic of the opening symposium with R. Philip Sheets, M.D., Maud E. Watson, Ph.D., and Howard Y. McClusky, Ph.D., as the speakers. At the evening meeting William J. Norton discussed Social Security. Round tables for health officers, for public health nurses, for sanitary officers, and for laboratorians occupied the second morning, with a symposium on Michigan Health Educational Activities featuring the afternoon session. This was under the sponsorship of the Joint Committee on Public Health Education, and Dr. Corbus acted as presiding officer in the absence of Dr. Bruce. Representatives of the major agencies of the state interested in educating the public in health reported on their activities, including four committee chairmen of the State Medical Society. This program gave in a surprisingly effective way a composite picture of health education activities.

Malcolm Bingay of the Detroit Free Press was the speaker at the Conference dinner, and the closing session on Friday morning was devoted to current developments in methods of communicable disease prevention and control.

The Michigan Association of School Physicians held a post-Conference session featuring tuberculosis control, with Dr. J. A. Meyers, Professor of Preventive Medicine at the University of Minnesota, as their main speaker.

Diphtheria

The number of cases of diphtheria reported in Michigan between January 1 and November 2, 1935, was 432, while for the same period in 1934 the number of cases was 483. This is an indication that the morbidity rate for the disease will continue its downward trend again this year.

It has been observed, however, that where outbreaks of diphtheria have occurred, all too frequently the first case has been fatal. Probably the most important reason for this is that the patient or parent is prone to overlook the possibility of diphtheria being the cause of sore throat and neglects to call a physician until several days have elapsed since the onset.

Under the circumstances it would seem that in addition to the obvious necessity for continued emphasis on this point in public health education, it might be well also to review the logical conduct of the physician after he is called to the case.

In the first place, the possibility of diphtheria as

a cause of illness, and especially in cases of croup and sore throat, should always be borne in mind. Throat and nose swabs for culture should always be taken where diphtheria cannot positively be ruled out, but this is no excuse for any delay in the administration of antitoxin if the clinical symptoms remotely suggest a diagnosis of diphtheria.

The making of direct smears from swabs for examination for diphtheria bacilli may aid in diagnosis when positive, but when the organisms are not found the negative finding should not influence the decision as to whether or not antitoxin should be administered. Cultures should be made from all swabs and the examinations conducted in an approved laboratory.

Cultures should be made from all intimate contacts of the case. These cultures may reveal a carrier responsible for the case and also may positively diagnose secondary cases. Such culturing of contacts, although seemingly an obvious duty of the attending physicians, is frequently neglected in favor of administering a prophylactic dose of antitoxin.

The increasing use of horse serums as vehicles for immune bodies in the treatment or prophylaxis of tetanus, meningococcic meningitis, pneumonia, scarlet fever, etc., makes it necessary to curtail indiscriminate use of antitoxin as a prophylactic if hypersensitivity to horse serum is to be kept at a minimum.

Children who have received toxin-antitoxin or toxoid are probably immune but they as well as those who have not received such treatments should be observed very closely for several days after exposure and given a therapeutic dose of antitoxin promptly on appearance of any clinical symptoms.

After one negative culture report has been received from the patient for release, the other members of the household in quarantine should be cultured to be sure that none have become carriers in the interval.

Changes in the Rules and Regulations for the Control of the Common Communicable Diseases

Changes have been made in the rules and regulations pertaining to two communicable diseases, poliomyelitis and typhoid fever.

The quarantine time for poliomyelitis has been changed from three weeks to 14 days from the onset. Likewise, the isolation period for contacts has been shortened to 14 days.

A number of changes and additions have been made in the rules for typhoid and paratyphoid. It is to be noted in particular that the required number of consecutive negative release stool specimens has been increased to three. The complete rules and regulations appear below, changes and additions being italicized.

Physicians may obtain information or a copy of the complete rules and regulations for all communicable diseases from their local health officer or the Michigan Department of Health.

Typhoid and Paratyphoid

Cases

Cases and suspected cases shall be reported.

No placard is required.

Cases shall be isolated until *three consecutive specimens of stools, taken at intervals of not less than four days or greater than two weeks*, have been examined in a registered laboratory approved by the Commissioner of Health and found free from typhoid or paratyphoid bacilli. *The first of these specimens shall be taken at a time not less than four weeks from the onset of the disease. If three consecutive negative stool specimens are not obtained from a case before three months have elapsed from the time of onset the State Commis-*

OBITUARY

sioner of Health may require an additional number before release.

Individuals having typhoid or paratyphoid who are professional food handlers shall not return to their work until four consecutive specimens of stools and urine taken at intervals of not less than four days or greater than two weeks, have been examined in a registered laboratory approved by the State Commissioner of Health and found free from typhoid or paratyphoid bacilli.

Disinfection of stools and urine and of all articles that may have come in contact with these discharges shall be carried on during the entire period of isolation.

Exposed persons living in the house with the patient shall not engage in any occupation connected with milk, dairy products or food supplies. The immunization of all such persons shall be urged by the health officer.

Carriers

For the purpose of these regulations a typhoid or paratyphoid carrier is defined as an individual from whom there has been obtained one or more specimens positive for the typhoid or paratyphoid organism and who has not had a clinical case of typhoid or paratyphoid within one year of date of specimen.

Persons who are typhoid or paratyphoid carriers shall not engage in any occupation that is in any way connected with milk or food supplies or live on the premises where such supplies are for sale. Carriers shall furnish for examination specimens of stools and urine upon request of the State Commissioner of Health. Any carrier planning to change his place of residence or his occupation shall notify the local health officer and the State Commissioner of Health before the change is made.

The State Commissioner of Health may require any person suspected of being a typhoid or paratyphoid carrier, to furnish for examination such specimens of stools and urine as may be required.

The State Commissioner of Health may require that any typhoid or paratyphoid carrier shall have twelve consecutive fecal specimens and two consecutive bile specimens which are negative for the typhoid or paratyphoid organisms before released from the regulations as stated above.

The home of any person who is or is suspected of being a typhoid or paratyphoid carrier, may be placarded if such person refuses to carry out the rules and regulations of the State Commissioner of Health.

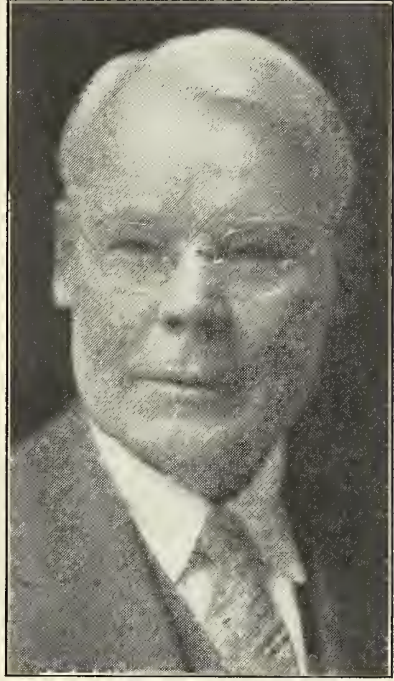
The State Commissioner of Health shall keep a record for interstate notification of any movement of carriers.

OBITUARY

Dr. James E. McGillicuddy

Dr. James E. McGillicuddy was a man of great native ability, who would have made his mark in any walk of life. Born of Eusebius and Ann Jane McGillicuddy, near Watford, Ontario, Canada, he was the fifth of nine children. His early years of study were passed at Watford High School; later he attended Western University, London, Ontario, University of Toronto, and the Detroit College of Medicine, receiving the degree of Doctor of Medicine in 1898. In 1899 he married Elizabeth Wiley of Strathroy, Ontario. This marriage was blessed with two sons, who, like their father, have chosen medicine as their life work.

For thirteen years he was engaged in practice at Shepardsville, Michigan. He then moved to Ovid, Michigan, where he became associated with Dr. Oliver B. Campbell in establishing a hospital, for which he always had a great liking. Quiet and dignified in manner, he possessed a great power of organization and the wisdom of measures he proposed was rarely questioned by his colleagues.



DR. JAMES E. MCGILlicuddy

Due to poor health he was compelled to relinquish his practice in Ovid in 1919. He moved to Lansing, where, after a prolonged rest, he resumed practice. During this time he had several serious illnesses which he faced with imperturbable courage, always returning to his work at the earliest moment. Everyone who came in contact with him was conscious of his great charm and he represented all that was best in our profession.

His particular interest outside his professional work was horticulture and riding horses. He served the Ingham County Medical Society as president in the turbulent days of 1931. He was chief of staff-elect at St. Lawrence Hospital for 1936.

To those of us who were privileged to call him friend, he was the same quiet undemonstrative individual, somewhat shy and retiring, but with a courage of resolution that was a sure support to all those on whom he conferred his friendship.

He had lived a full life and left a deep impression on his friends and colleagues. To his bereaved family, his friends and colleagues extend their deepest sympathy.

Dr. Charles F. Kuhn

Dr. Charles F. Kuhn died suddenly at 2 A. M., December 10, 1935, at his home, 4505 Commonwealth Avenue, Detroit. The cause of death was coronary disease. Dr. Kuhn was born in Detroit sixty-five years ago and had lived there all his life. He graduated from the Detroit College of Medicine in 1901. In 1913, he founded the Samaritan Hospital, now St. Joseph's Mercy Hospital. He later founded

CORRESPONDENCE

the Warren Avenue Diagnostic Hospital of which he was director at the time of his death. Dr. Kuhn had an intense interest in his professional work. Not only did he devote a great deal of mental and physical energy to the practice of medicine, but he was interested in civic affairs. He was a member of the Detroit Board of Education from 1907 to 1911, and president of the board, 1910-1911. Besides a number of fraternal societies, Dr. Kuhn's professional affiliations were as follows: Fellow of the American Congress of Surgeons, a member of the Detroit Academy of Surgeons, American Medical Association, Michigan State Medical Association, Wayne County Medical Society and the East Side Medical Society.

He is survived by his widow, Mrs. Ella M. Kuhn; nine sons, Charles, Albert, John, Henry, Robert, Edward, George, Paul, and Richard Kuhn; two daughters, Helen and Clarabelle; three sisters, Mrs. Charles F. Beardslee, Mrs. William McClure, and Mrs. H. B. Stofer, and two brothers, Edward J. and Arthur C. Kuhn.

Dr. George J. Baker

Dr. George J. Baker, of Detroit, died at St. Joseph's Hospital, Ann Arbor, Sunday, December 1, at the age of fifty-six years. He was born in Glengarry County, Ontario. He attended the Detroit College of Medicine, graduating in 1909. He was a member of the staff of St. Joseph's Mercy Hospital, Detroit, also, of the Wayne County and Michigan State Medical Societies. He is survived by his wife and two sons, George and John Baker, and two daughters, Mary and Barbara Baker.

CORRESPONDENCE

Regarding Ownership of X-ray Films

To the Editor:

I am sorry my comment on your article on "Ownership of X-ray Films" in the November JOURNAL has been so long postponed.

I think your comments on the Supreme Court decision are very good. Possibly something more might be said relative to films taken in hospitals. I do not think that it is quite clear that even these films must be considered the property of the attending physician because they are part of his diagnosis. I do not feel that the hospital should be given jurisdiction or title to these films but that the hospital should merely be considered custodian with the power to release either film or report only on written order from the attending physician.

There has lately arisen in Michigan, a demand by certain insurance companies that these x-ray films be sent through the mail to their office, either within or without the state, for inspection or review, presumably by some one whom they may consider an authority in the interpretation of films. Granting that this situation may have arisen from the fact that probably insurance companies have had a costly experience due to misinterpretation by non-qualified pseudo-roentgenologists, yet the fact remains that when such films are placed in the mail, the attending physician is placing in jeopardy his most valuable evidence. It is commonly supposed that in compensation cases the attending physician may be relieved from the burden of personal malpractice—however, this defense has been successfully penetrated in some Eastern Courts and, so far as I know, has never been decided in the case of minors.

I am, at this writing, in controversy with an insurance company over this matter. They have been

advised that all my records, including the films, are subject to revision by anyone whom they might designate, in my office, but that unless they are willing to agree to indemnify me for any potential damages on account of loss of films in transit, that we would prefer not to comply with their request. As a side thought along this same line, the experience of the last few years has shown that many insurance companies have gone bankrupt, throwing the compensation responsibility back directly upon the employer, in which case if the insurance company's request has been complied with and the films have been lost, the vital interest of the employer may have been unduly jeopardized.

C. S. GORSLINE, M.D.

Battle Creek, Dec. 7, 1935.

GENERAL NEWS AND ANNOUNCEMENTS

Dr. Sarah J. Lloyd of Detroit died December 2, at the Deaconess Evangelical Hospital, Detroit, after a week's illness. She was born in Detroit ninety-five years ago and was well known to many of the older Detroit families, whom she served as physician.

* * *

Gladwin County, through error, has been designated as one of the counties in the eighth Councilor District. Several years ago, the House of Delegates placed Gladwin County in the Tenth District, of which Dr. Paul R. Urmston is Councilor.

* * *

Dr. Grover C. Penberthy, president of the Michigan State Medical Society, was guest speaker at the Economic Club of Detroit on November 18. Dr. Penberthy's subject was, "How the Physician Helps His City, State and Nation."

* * *

In this number of the JOURNAL, page 53, appears a contribution by Dr. William Haber, Administrator of the Emergency Welfare Relief Administration, at Lansing. Dr. Haber's communication is of particular interest at this time, considering the fact that Federal funds are no longer available for medical relief.

* * *

The Ohio State Medical Association House of Delegates adopted a resolution at its recent annual meeting urging officials of all accredited American medical colleges to provide instruction for senior students on the activities, services, and benefits of organized medicine. Apparently graduates of some medical schools are unfamiliar with the objectives and activities of organized medicine.

* * *

Dr. E. S. Judd of the Department of Surgery of the Mayo Clinic, Rochester, Minnesota, died at the Presbyterian Hospital, Chicago, of pneumonia after a week's illness. He was on his way to a meeting of the American Clinical Society, Philadelphia, when taken ill. Dr. Judd was fifty-seven years old. He was one of the most widely known surgeons in America. He was recently president of the American Medical Association.

* * *

Dr. Edgar E. Poos, Detroit, writes from London, England, where he is taking post-graduate

JOUR. M.S.M.S.

work: "I see there is still agitation for Insurance Medicine. It is not the thing for either the Medical Profession or the public. The general practitioner here has become only a clerk in making out forms, and the public receives a very poor service, but luckily the lower class here doesn't know any better. "We shall be home Christmas. Give my best regards to the Profession."

* * *

The Southwestern Michigan Triological Society held its regular meeting in Grand Rapids, on November 21. After dinner at the Rowe Hotel, papers were presented by Dr. Myron Metzenbaum, Cleveland, Ohio, and Dr. R. Wallace Teed, Ann Arbor, Michigan. Dr. O. B. McGillicuddy, Lansing, was elected president for the coming year, and Dr. John McRae, Grand Rapids, vice president. Dr. Maurice C. Loree, also of Lansing, was elected secretary and treasurer.

* * *

The American Medical Association dramatized radio programs are given each Tuesday afternoon at 5 P. M. (E.S.T.) on a coast-to-coast network of the NBC. The titles this month are:

January 7—"Winter Ills" by Dr. Morris Fishbein.

January 14—"Diphtheria," by Dr. W. W. Bauer.

January 21—"Scarlet Fever," by Dr. Morris Fishbein.

January 28—"Health of the Traveler," by Dr. W. W. Bauer.

* * *

Debate Handbooks, available for high school, college, and university debaters, on the subject "Socialization of Medicine," which topic many states have adopted, are four in number:

1. Free Medical Care—E. C. Buehler, Director of Forensics, University of Kansas.
2. Socialization of Medicine—Julia E. Johnsen (H. W. Wilson Co., New York)
3. Socialized Medicine (2 volumes)—Bower Aly, Asst. Professor of English, University of Missouri.
4. Complete Handbook on State Medicine—J. Weston Walch, Debaters Information Bureau, Portland, Maine.

* * *

The American Board of Ophthalmology will hold the 1936 examinations at Kansas City on May 11, at the time of the American Medical Association, and also in New York City in October at the time of the meeting of the American Academy. All applications and case reports must be filed with the board at least sixty days before the date of the examination. For information, syllabuses and application forms, the candidates for the examination should write at once to Dr. Thomas D. Allen, Assistant Secretary of the American Board of Ophthalmology, 122 South Michigan Avenue, Chicago. It is important that those specializing or limiting their practice to ophthalmology should become diplomates of the Board of Ophthalmology.

* * *

The November number of the *Annals of Medical History* contains an interesting paper by Dr. Irving I. Edgar of Detroit, on "Shakespeare's Medical Knowledge: A Study in Criticism." Dr. Edgar has made a number of important studies of Shakespeare from the medical viewpoint which have appeared in the following publications: "Medical Practice and the Physician in Elizabethan England and in Shakespeare's Dramas," *Medical Life*; "Shakespeare's Psycho-pathological Knowledge," *Journal of Abnormal and Social Psychology*; "The Acquisition of Shakespeare's Medical Knowledge," *Canadian Medical Association Journal*. The preparation of these papers represents a vast amount of literary research for which Dr. Edgar is to be highly commended.

Dr. William M. Donald of Detroit has resigned from the position as chief of staff of the Protestant Children's Home. At the annual meeting of the board of trustees, on January 9, a luncheon was given in his honor, jointly by the board and the medical staff. Dr. Andrew P. Biddle spoke of Dr. Donald as a physician; Dr. W. J. Stapleton, acting dean of the Wayne University Medical School, discussed Dr. Donald as a teacher, and Dr. J. H. Dempster of Detroit spoke of Dr. Donald as a citizen. The staff of the Protestant Children's Home, for the current year, is as follows: Surgery—Dr. H. K. Shawan; dermatology—Doctors Andrew P. Biddle and Cyril K. Valade; eye, ear, nose and throat—Dr. Ray W. Hughes; orthopedics—Dr. William E. Blodgett; neurology and psychiatry—Dr. David Clark; dentistry—Doctors A. C. Thompson and Jack Stoughton; medicine—Dr. H. L. Perlis.

* * *

The American Foundation Studies in Government, of New York City, has been circularizing the medical profession asking physicians for certain opinions. Complete information as to just who is behind the foundation, or to what purpose the Foundation intends to use the information is not known at this date. Certain contacts between the American Medical Association and the Foundation are slated for January. Thereafter, full information will be disseminated to the profession.

In the meantime, physicians should weigh carefully any opinions they may express, keeping in mind the pronouncements of the American Medical Association as expressed by its House of Delegates in Cleveland, Chicago, and Atlantic City. The organized medical profession of America has spoken in a clear-cut, decisive manner relative to its stand on matters of medical service for the American people.

* * *

William Haber, SERA Administrator for Michigan, was interviewed on November 29, 1935, relative to a newspaper story that the SERA was considering a plan to hire physicians on salary to continue medical relief work in Michigan. Dr. Haber's answer was that the Kent County Commission voted to hire physicians on salary to do the work in that county, stating they could save \$6,000. This seemed to Dr. Haber to be too high an estimate. The Kent County action was based on the question of finances, a matter of holding down to the budget. Dr. Haber was present at the meeting and stated he was against the action, as he personally is for the principle of the family physician-patient relationship. Dr. Haber requested the Kent County officials to delay action on their decision until the next day in order to see whether he could procure the necessary finances for Kent. Next morning Dr. Haber called the Kent County Commission and reported that the necessary money was available, so the ruling was changed and Kent County is continuing on the family physician basis.

* * *

To Encourage Goiter Study

The American Association for the Study of Goiter again offers the Van Meter Prize Award of \$300.00 and two honorable mentions for the best essays submitted on the goiter problem. This award will be made at the discretion of the Society at its next annual meeting to be held in Chicago, Illinois, on June 8, 9 and 10.

The competing manuscripts, which should not exceed 3,000 words in length, must be presented in English and a typewritten double spaced copy sent to the Corresponding Secretary, Dr. W. Blair Mosser, 133 Biddle Street, Kane, Pennsylvania, not

later than March 1, 1936. Manuscripts received after this date will be held for competition the next year or returned at the author's request.

The Committee who will review the manuscripts is composed of men well known in the fields of research and clinical investigation of problems related to the thyroid gland. This Committee did not consider any of the manuscripts submitted at the last annual meeting to be of a caliber to justify the award, and consequently the award for the year 1935 was withheld by the Association.

* * *

The President's Page this month calls attention to a number of excellent pamphlets on sickness insurance and related subjects which are available. The secretary of your county medical society can procure copies of these pamphlets for you.

The Bureau of Medical Economics, American Medical Association, 535 North Dearborn Street, Chicago, Illinois, publishes the following:

1. Sickness Insurance Not the Remedy.
2. Sickness Insurance Catechism.
3. Sickness Insurance and Sickness Costs.
4. A Critical Analysis of Sickness Insurance.
5. A Handbook of Sickness Insurance, State Medicine, and the Costs of Medical Care.
6. Health Insurance in England and Medical Society Plans in the United States.
7. Contract Practice.
8. Group Hospitalization Contracts are Insurance Contracts.
9. New Forms of Medical Practice.
10. Prepayment Plans for Hospital Care.

The State Medical Society of Wisconsin, 119 E. Washington St., Madison, Wisconsin, has sponsored two publications:

11. Sickness Insurance and the Propagandist Foundations.
12. Social Medicine and Sickness Insurance.

The Minnesota State Medical Association, 11 W. Summit Avenue, Saint Paul, Minnesota, publishes:

13. Handbook on High School Debate Questions.

The Chester County Medical Society, 37 S. High Street, West Chester, Pennsylvania, just released:

14. A Digest of Sickness Insurance.

* * *

Dr. Sensenich Meets Congressman John D. Dingell

Dr. R. L. Sensenich, president of the Indiana State Medical State Association, was the guest speaker before the Wayne County Medical Society, December 16. Congressman John D. Dingell, of the 15th District, Detroit, was also an invited guest. Mr. Dingell preceded Dr. Sensenich in a half-hour address in which he expressed himself as opposed to any regimentation of the medical profession by any government, but as strongly favoring compulsory health insurance. He said, however, if his viewpoint was wrong, he desired enlightenment.

Dr. Sensenich followed Mr. Dingell, making it clear, however, that he and the congressman were not engaging in any debate. All he wished to do was to tell what he knew of compulsory health insurance, where it had been adopted, and the attitude of various groups toward the idea. Dr. Sensenich's address was a masterful presentation of the negative side of compulsory health insurance. Among other things, he stated that labor was definitely opposed to it. They preferred a wage that would leave them free as to the choice of medical attendant. Many other groups were, likewise, opposed. Conditions regarding health were better here than in those countries under compulsory health insurance laws. Morbidity was less here per unit of population. The speaker went on to say that instead of solving the problem of the low income

group and the unemployed and unemployables, this class would not be favorably affected inasmuch as they would not be financially able to participate. He felt that there was no appreciative dissatisfaction among the mass of the population in regard to available medical care. The movement for compulsory health insurance had its origin largely with social workers and some well-meaning but ill-advised foundations.

Mr. Dingell followed, stating that Dr. Sensenich had placed the matter of health insurance in a new light and that he felt he would require to modify his position on the subject.

* * *

Diplomates of the American Board of Radiology

The following Michigan physicians have been awarded diplomas by the American Board of Radiology. "Radiology" includes x-ray and radium therapy and x-ray diagnosis. "Roentgenology" means x-ray diagnosis and x-ray therapy and "diagnostic roentgenology" includes x-ray diagnosis but not x-ray or radium therapy.

The following are Diplomates of the American Board of Radiology:

Birkelo, Carl C., Detroit—Roentgenology
 Cooley, Randall M., Jackson—Diagnostic Roentgenology
 Crane, Augustus W., Kalamazoo—Roentgenology
 Dempster, James H., Detroit—Diagnostic Roentgenology
 Donaldson, Samuel W., Ann Arbor—Roentgenology
 Doub, Howard P., Detroit—Radiology
 Evans, William A., Detroit—Radiology
 Ford, Frances A., Detroit—Radiology
 Freedman, John, Detroit—Roentgenology
 Gorsline, Clarence S., Battle Creek—Roentgenology
 Hall, E. Walter, Detroit—Radiology
 Hasley, Clyde K., Detroit—Radiology
 Hodges, Fred J., Ann Arbor—Radiology
 Holly, Leland E., Muskegon—Roentgenology
 Jackson, John B., Kalamazoo—Roentgenology
 Jacox, Harold W., Ann Arbor—Radiology
 Jarre, Hans A., Detroit—Radiology
 Johnson, Vincent C., Ann Arbor—Radiology
 Jones, Horace C., Detroit—Radiology
 Kenning, John C., Detroit—Radiology
 Kolvoord, Theodore, Battle Creek—Diagnostic Roentgenology
 Leucutia, Traian, Detroit—Radiology
 Menees, Thomas O., Grand Rapids—Radiology
 Minor, Edward G., Detroit—Diagnostic Roentgenology
 Moore, Vernor M., Grand Rapids—Radiology
 Peirce, Carleton B., Ann Arbor—Radiology
 Porter, Horace W., Jackson—Radiology
 Reynolds, Lawrence, Detroit—Radiology
 Sanderson, Stevens S., Detroit—Radiology
 Shebesta, Emil M., Detroit—Radiology
 Shore, Offley J., Detroit—Diagnostic Roentgenology
 Smith, Richard L., Grand Rapids—Radiology
 Stevens, Rollin H., Detroit—Radiology
 Ulbrich, Henry L., Detroit—Roentgenology
 Upson, Wilbur O., Battle Creek, Radiology
 Weaver, Clarence E., Detroit—Roentgenology
 Witwer, Edwin R., Detroit—Radiology

* * *

Councilor District Meetings have been held in all of the seventeen districts of the State. Most of the counties have certified lists of their public relations committees to the Executive Office of the State Society. Just a few are missing. In addition, many of the county medical societies have already established their medical filter board, and have ap-

pointed a medical representative to act in an advisory capacity with the probate judge on economic investigation.

This activity has entailed much extra work upon the Councilors and the Public Relations Committee of the Michigan State Medical Society. It has resulted, however, in an understanding of the physicians' problems by probate judges, county supervisors, and other officials who previously had no clear-cut knowledge regarding the medical man's viewpoint or the extent to which physicians could aid in solving knotty matters.

Public acclaim of the physicians' plans to tighten the reins on medical costs handled through the Probate Court is apparent in the newspaper stories published in various parts of the state. Typical is the following clipping from the *Port Huron Times Herald* of December 13, 1935:

18 APPLICANTS FOR FREE HOSPITAL CARE APPROVED AT CLINIC

Eighteen applicants for free hospitalization at the expense of St. Clair county were approved by a committee of physicians, appointed by the county medical society, at the first of a series of clinics, held this morning in the city health office in Port Huron.

The clinic was the start of the "filter system" of determining need of free hospitalization for indigents of the county. There were 22 applicants for aid. The 18 approved by the physicians will be referred to Probate Judge Clair R. Black, who will make the final decision. All cases were investigated to determine if they are unable to pay their own costs of hospitalization.

Dr. J. H. Burley, Dr. A. L. Callery, city health officer; Dr. T. E. DeGurse, Marine City; and Dr. Charlton A. MacPherson, St. Clair, conducted the examinations.

The decision to hold clinics at 10 a. m. Fridays was made at a meeting of the welfare committee of the St. Clair county board of supervisors, a committee of the medical society, with Probate Judge Clair R. Black, Poor Commissioner Justin R. Kells, William B. Van Valkenburgh, secretary of the county board of auditors, and Glenn H. Davis, mothers' pensions investigator for the county.

Members of the welfare committee are Verne L. Graham, chairman; Roy T. Gilbert, Robert M. Farr, William B. Thompson and Harry Schuberth. The committee of physicians is composed of Dr. George Waters, Dr. T. E. DeGurse, Dr. A. L. Callery, city health officer, and Dr. K. B. LeGalley, county health officer.

Judge Black explained at the meeting that the Probate Judges' association of Michigan, the State Medical Society and the State Hospital Association, at meetings called by Auditor General John J. O'Hara, had decided that handling of afflicted and crippled children's cases must be determined on a basis of emergency and actual need after investigations as to their financial status and physical examinations. Judge Black attended several meetings of the state associations.

BEST SYSTEM

"We believe that the 'filtering system,' is the best method to avoid giving hospital care to persons who can take care of themselves financially," Judge Black said today.

"The welfare committee and the doctors decided that the system should also be used for adults of the county as well.

"Under the filtering system, an applicant for medical care must apply to the auditors' office, which will investigate the applicant's financial status. The applicant next is sent to the clinic, where he is examined by physicians.

"If the auditors and physicians both approve hospitalization for the applicant, the case is referred to the probate court, which issues the order for hospital care."

Judge Black said the plan is being used successfully in Bay county and is being studied by other counties.

* * *

Genesee Physicians Honored

The Genesee County Medical Society met November 6 and honored three of the older members of the society, Dr. H. W. Graham of Mt. Morris, Dr. B. E. Burnell of Flint, and Dr. A. S. Wheelock of Goodrich. After a dinner at the Dresden Hotel and a musical program, each of the three guests was made an honorary member of the society. There were eighty-seven members of the Genesee County Medical Society present, including Dr. John W. Handy and Dr. Jefferson Gould, who were made honorary members at an earlier meeting. The

Bulletin of the Genesee County Medical Society contains the following account of the three new honorary members.

"Dr. Hugh W. Graham has lived in Michigan since he was a small boy, having been born on a farm near Toronto, Ontario, in 1868, and at the age of six came to the vicinity of Mt. Pleasant with his parents, where he continued to live until his college days. After graduating from the high school at Mt. Pleasant he entered the medical department of the University of Michigan, where he received his degree in 1892. He immediately began the practice of medicine in Mt. Morris where he not only became successful in his profession but active in civic affairs. Dr. Graham served as councilman in his home town and later became the village President, which he continued to hold for eight years. He was President of the Mt. Morris School Board for eighteen years. Other interests consisted of ownership of a grain elevator and stock raising. Positive in his convictions, he has always been a tireless worker for the welfare of his clientele, and the betterment of his community.

"Dr. Byron E. Burnell is a native of Genesee County, having been born in Otisville, January 7, 1867. In 1886, he was graduated from the Flint High School; at a time when Flint was transforming from a lumbering town to that of a center for the manufacture of wagons and buggies. In 1901, Dr. Burnell had prepared himself for the practice of medicine and returned to establish himself in general practice. In about two years the automobile industry located here and started a mushroom growth, which meant a succession of pestilences should follow, particularly typhoid. It was during these days when Flint was suffering from growing pains that Dr. Burnell was his busiest. He gained an enviable record as an obstetrician, and one time was an exceedingly active insurance examiner. Country trips were frequent and arduous, and it seems almost certain the doctor will never forget the gumbo clay of the Miller road and similar thoroughfares. Dr. Burnell has always been a strong advocate of close professional unity; he has endeared himself to his colleagues and the families he has served so long. His life has been a counterpart of our ideal of a family doctor and a gentleman.

"Dr. Amos S. Wheelock was born at Bridgewater, Michigan, December 7, 1861, and received his early education at Manchester. He spent one year in the literary department of the University of Michigan and then took up the study of medicine, receiving his degree in 1888. Since then he has continued to practice his profession in Goodrich, where in 1916 he established a hospital. For forty-five years he has been a member of the School Board, and for many years was a director of the Bank of Goodrich. Dr. Wheelock has pursued a number of post-graduate courses and has been a regular attendant at many of the various national surgical meetings. He is still an active practitioner in Flint and Goodrich."

* * *

Everybody knows the Doctor; a very important person he is to us all. What could we do without him? He brings us into this world, and tries to keep us as long in it as he can, and as long as our bodies can hold together; and he is with us at that strange and last hour which will come to us all, when we must leave this world and go into the next. When we are well, we perhaps think little about the Doctor, or we have our small joke at him and his drugs; but let anything go wrong with our body, that wonderful tabernacle in which our soul dwells, let any of its wheels go wrong, then off we fly to him.—HORÆ Subsecivæ, by DR. JOHN BROWN.

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column and this will be deemed by us a full compensation to those sending them. A selection will be made for review, as expedient.

NEW PATHWAYS FOR CHILDREN with Cerebral Palsy. By Gladys Gage Rogers, director of Robin Hood's Barn—a camp school for children with cerebral palsy; and Leah C. Thomas, director of Therapeutics at Robin Hood's Barn. Illustrated. Price, \$2.50. New York: The Macmillan Company, 1935.

This work describes successful efforts in the matter of rehabilitating the handicapped child.

* * *

ESSENTIALS OF PSYCHOPATHOLOGY. By George W. Henry, Associate Professor of Psychiatry, Cornell University Medical School, New York; Attending Psychiatrist, New York Hospital, New York City. Pages, 307. Price, \$4.00. Baltimore: William Woods Company, 1935.

We have a large subject condensed to the proportions of a monograph. The author has dealt with the nature and causes of personality disorder together with a description of methods of examination in a comprehensive way for medical students as well as members of the medical profession. The headings of some of the chapters indicate the content of the book: Heredity and the Function of the Brain, the Relation of Physical Disease to Toxic Disorders, Personality Integration, Mental Dynamics, Maladjustment in Childhood; thirty pages are devoted to psychiatric case records. An introduction by Dr. Adolf Meyer states among other things that "besides being a valuable supplement to the available texts, the book cannot help being a source of support and encouragement to all who labor in the psychiatric field."

* * *

X-RAY STUDIES IN ADVANCED RADIOGRAPHIC TECHNIC. Edition III. Pages 100, illustrated. Published by the General Electric X-ray Corporation.

This book is of composite authorship. While it is of service to x-ray technicians, it is also important for roentgenologists. It is profusely illustrated as any work pertaining to radiology must be. Roentgenology is an illustrative specialty. Its efficiency depends upon radiographs that are in the highest degree diagnostic. Only with the best possible films, coupled with diagnostic ability and experience, can the roentgenologist render his greatest service to medicine. Any advancement in technic is therefore welcomed by the roentgenologist.

* * *

BAD BREATH. By Louis Pearlman, M.D. M. M. Brooks, Publisher, New York.

In spite of its having a sufficiently attractive binding, this little volume is not one which the interested purchaser will leave lying in a conspicuous place on the living room table or, if he be a book lover, give it a place among a treasured collection. The reasons are obvious. Yet it is one that will bring comfort and satisfaction to the sufferer looking for sensible information on the subject the book treats. In keeping with his choice of honest Anglo-Saxon words for the title rather than the ominous Greek derivative with which the advertising world has impressed the victim, the author gives, the underlying causes of bad breath and tells what medical science offers for those causes, and what the patient can do about it with every-day hygiene. The physician who tells his patient about the book will not only have the latter's gratitude but he will save himself the necessity of leaving unanswered the now so frequently demanded expositions or of translating them into monosyllabic similes suited to those not versed in science.

DISEASES OF THE THYROID GLAND. By Arthur E. Hertzler, M.D., Chief Surgeon, Halsted Hospital; Professor of Surgery, University of Kansas, with a chapter on Hospital Management of Goiter Patients by Victor E. Chesky, M.D., Chief Resident Surgeon, Halsted Hospital. Third edition. Entirely rewritten. St. Louis: The C. V. Mosby Company, 1935.

In this third edition of his work on diseases of the thyroid gland, Doctor Hertzler gives his view of the subject of goiter gained from a large experience. While his conception of goiter does not agree in all its phases with some others, and while his classification of the disease does not correspond with that of the Society for the Study of Goiter, his handling of the subject is in a clear, forceful manner that enables the reader to easily grasp the author's conception of the disease. He stresses the fact that the presence of goiter should not, of necessity, incriminate the enlarged thyroid as the cause of the symptomatology. A complete study of the history of the patient, together with a complete physical examination, can lead to a proper evaluation of the case, only when considered in the light of a large clinical experience with goiter. He minimizes the value of the study of the metabolic rate, unless it be considered as secondary in value to the information gained by history and examination.

He regards the simple, diffuse colloid goiter of children as evidence of physiologic disturbance and, while it may subside with medical treatment if anatomical change in the gland has taken place, only surgical treatment will result in cure. Anatomical changes progress to the adenomatous state, toxicity eventually supervenes and death from cardiac involvement is inevitable. He points out that the thyroid gland is of much more importance to the growing child than to the adult and that the operating surgeon need not be particular about how little gland he leaves at operation. In his experience, myxedema does not supervene.

* * *

OBSTETRICAL PRACTICE. By Alfred C. Beck, M.D., Professor of Obstetrics and Gynecology, Long Island College of Medicine; Obstetrician and Gynecologist in Chief, Long Island College Hospital, Brooklyn. Pages, 711; more than one thousand illustrations. Baltimore: The Williams & Wilkins Company, 1935. Price, \$7.00.

The obstetrical department of the Long Island College Hospital has long been recognized as one of the leading departments of its kind in the country. "Obstetrical Practice" by A. C. Beck, Chief of that department, is in keeping with its reputation. Those who have met Dr. Beck and especially those who have had the privilege of attending his lectures know him to be a very efficient teacher, conscientious, un-dramatic, concerned only with presenting his material in such a way that it will have practical value at the patient's bedside.

This book is a faithful reflection of its author. Unlike many books in use at present, it separates "the wood from the trees," and presents to the reader only those measures both diagnostic and therapeutic which have been abundantly tried and proved.

The book is in effect a summary of Dr. Beck's lectures to his students and to postgraduates. It is profusely illustrated. It runs the whole gamut of obstetrical knowledge. To the student it means more information with less work; while the practitioner will find in it the details of treatment both medical and operative which are so sadly lacking in many textbooks in use today.

Of course, in many instances there are acceptable alternative procedures to those outlined by Dr. Beck, but it is sufficient for the student and practitioner to know that there is available in this volume the details of diagnostic and therapeutic procedure which have been successfully used in one of the country's outstanding clinics—a clinic made famous by its present chief and his illustrious predecessor, the late John Osborn Polak.—G. E. H.

THE JOURNAL

OF THE

Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. 35

FEBRUARY, 1936

No. 2

COMMON LESIONS OF THE CERVIX*

NORMAN F. MILLER, B.S., M.D.
ANN ARBOR, MICHIGAN

The rare things in medicine are neither the most interesting nor the most important. The insignificant cold may lead to dangerous pneumonia and the trivial ulcer often terminates as a carcinoma. No better example of the importance of minor conditions can be found than in the common everyday garden variety cervical lesions. As a forerunner of serious pelvic disease they stand in uncontested first place. Recognition of this fact by physicians in general would deal a powerful blow to disease of the female pelvis—a *preventive measure of the highest order*.

Conservationists recognize the importance of prevention in reducing timber loss from fire. Prevention is fundamental, it is basic. Fire fighting apparatus which can be quickly mobilized to any part of the timber lands is available for putting out fires before they are well started. Prevention is also said to play an important part in modern medicine, yet in the field of gynecology it appears to be little more than a pipe dream. The vast number of women treated for menorrhagia, metrorrhagia, backache, pelvic pain, etc., etc., with never a pelvic examination, is ample proof of this contention.

Many physicians hold that the cervix is a much abused organ. That it is the object of considerable meddlesome interference by physicians in general, and gynecologists in particular. Those who lean to this view are likely to overlook significant precursors of serious pelvic disease. Theirs is the error of omission rather than commission. True, many physicians subject every cervix to careful scrutiny. With colposcope and microscope they regard its peculiarities. Their enthusiasm may bring the patient added ex-

pense and minor discomforts, but theirs are errors of commission and seldom of serious import.

There is no mystery concerning the common lesions of the cervix. A familiar sight to every practicing physician, most of them need no lengthy description. However, since the aim of this paper is to bring out the potentialities of these lesions, a clear understanding of their nature is essential. Interpolation of the following descriptions may, therefore, be looked upon as a brief review, necessary for a better understanding of this paper.

Erosion of the Cervix.—The term erosion comes near being a misnomer. Only for a brief period does the term actually describe the lesion of the cervix which carries this appellation. Actually a so-called erosion of the cervix is a reddened area around the external cervical os, somewhat irregular in outline and produced by columnar epithelium of the type lining the cervical canal. Whether this replacement of squamous by columnar epithelium is the result of metaplasia, spread from ectopic glands, or downward extension of columnar

*From the Department of Obstetrics and Gynecology, University of Michigan, Ann Arbor, Michigan.

epithelium from the canal proper is not definitely known. Significant as a predisposing factor is chronic irritation, most likely from infection. Apparently the columnar epithelium is better able to withstand irritation (chemical and bacterial, or both) resulting from infections of the cervical canal and as a consequence, is often called upon to spread its protective membrane beyond its normal boundaries. This substitution or replacement of squamous by columnar cells is preceded by sloughing or loss of squamous epithelium from the immediate vicinity of the external os. At this stage of development an "erosion" of the cervix may truthfully be said to exist. Loss of normal flat epithelium, however, lasts but a short time, for it is soon replaced by the tall columnar cells which characterize the lesion. During its stay the columnar epithelium, true to form, lays down new glands where normally glands do not exist. Removal of the predisposing irritation leads to healing, squamous epithelium pushing its way back to force away the ectopic columnar cells. Doubtless this replacement process, which occurs in both directions, is largely dependent on environment favorable to one or the other cell type. Healing, however, seldom obliterates entirely all evidence of preëxisting erosion, once the columnar epithelium has become deeply rooted. The new formed aberrant glands remain to be disposed of. This is sometimes accomplished by down growth of squamous epithelium into the glands, while, in other instances, the returning epithelium merely bridges over the gland duct. In the former we find buried epithelial plugs and in the latter case aberrant glands without openings are seen. Possible significance of these changes will be pointed out later.

Erosions of the cervix are also said to be congenital. No doubt they occur but it must not be forgotten that erosions found in children or young unmarried women can also be explained on the basis of preëxisting genital tract infection. This need not be specific—indeed it appears that erosions are more often associated with non-gonorrheal types of cervical gland infection.

Eversion.—Eversion or ectropion occurs secondarily to lacerations of the cervix and, as the name implies, means a rolling out of the lining mucous membrane. Unless associated with an erosion it may readily be dis-

tinguished from the latter by its localization to the central portions of both anterior and posterior cervical lips. The difference between an erosion and eversion is significant. It is the difference between aberrant and normally located epithelium and glands, and the difference in etiology.

Cystic Change.—Cystic change of the cervix is also secondary in origin. Its occurrence, subsequent to an erosion, may be readily understood when we recall that normally there are no glands in the vaginal surface of the cervix. New aberrant glands are formed in this region, however, in the development of an erosion. Healing results in the new glands being filled with flat epithelial cells or the gland ducts may be bridged by squamous epithelium resulting in dilatation of the occluded gland. Small as these glands are, they may become markedly distended with their own mucus, reaching the size of a pea or marble.

Chronic inflammation of the cervix may be responsible for cystic change deeper in the cervical tissues. The edema and connective tissue changes, which are part of an inflammatory process, cause narrowing or compression of the gland lumen, resulting in distention to the point of cyst formation. These cysts, also spoken of as Nabothian cysts, appear as one or more "sago seed" bodies buried under the cervical epithelium. Puncture of their thin covering results in discharge of the clear mucous content. Like all aberrant tissues these dilated or cystic glands may be precursors of other more serious diseases.

Cervicitis.—Cervicitis implies a more general involvement of the cervix in contradistinction to infection localized only in the cervical canal. The term endocervicitis, or infection of the glands lining the canal, though useful and descriptive of acute infections, is not adequate for the vast majority of cervical infections. Starting as a localized process in the compound branched glands of the cervical canal the inflammatory reaction rapidly spreads to involve the deeper structure of the cervix. This must be fully comprehended to realize the extent of involvement and potential damage resulting from cervicitis. Changes induced by chronic long standing infections are well known. Increased fibrosis and loss of normal vascularity are common results. Loss of elasticity and normal responsiveness to

the forces of labor is only one of the many difficulties caused by the insignificant appearing changes in the cervix.

Cervical Lacerations.—Description of these common lesions is unnecessary. Except for hemorrhage in extensive tears there are no symptoms caused directly by the acute tear. Similarly old cervical tears seldom cause symptoms directly. More often the laying open of the cervix associated with constant exposure to infection, leads to such subsequent changes as scarring with cicatrix formation, hypertrophy, infection, inflammation, which in turn causes untoward symptoms. Being such a potent contributory factor in causing other diseased conditions of the cervix their repair is generally indicated in the more extensive cases.

These, then, are the common lesions of the cervix. They are seen by physicians every day. And that, precisely, is the theme of this paper. Too frequently the physician sees only the cervix. He fails to recognize that an erosion of the cervix is not just misplaced epithelium. It is more than that. Similarly cervicitis is more than just an infection of the cervix. *If "prevention" in gynecology is to be more than a pipe dream then these common lesions of the cervix must be reëvaluated* and from several points of view. Every cervical lesion should be weighed in the light of the following possibilities:

1. *As a precancerous lesion.*—Carcinoma of the generative tract is the most common form of cancer in the female and cervical cancer heads the list. We do not yet know which, if any, of the several lesions discussed is the true forerunner of cervical cancer, yet there exist certain facts which are too well established to be overlooked in this connection. Thus it is generally accepted that *cancer does not begin in healthy tissue*, that it is *always local in its incipency*, and that *there is a precancerous stage* even though the particular lesion cannot, as yet, be named. If these things be true, and we believe they are, then there can be no good reason why every common lesion of the cervix should not be viewed with suspicion and treated until cured. Only by recognizing these facts and by seeing to it that every patient who consults us has or is made to have a healthy cervix, can we really hope to make headway in the prevention of cer-

vical cancer. No valid argument exists that will justify the old attitude of watchful neglect. The simple yet adequate remedial measures available for treating these conditions no longer justify indecision or therapeutic vacillation.

2. *As a focus of infection.*—Perhaps the case against the infected cervix as a focus of infection is not yet so impressive. Yet, until the problem has been definitely settled, every infected cervix should be looked upon as potentially just as important a focus of infection as any other accepted focus in the body. Why should an active infection in one part of the body—in a tooth let us say—be a serious menace to health, and yet an active cervical infection be harmless? Sound logic will not permit our accepting such a fantastic view. There are many very good reasons why the cervix cannot be overlooked in search for foci. Histologically it is ideally constructed for just such purpose. The compound branched glands, abundant blood supply and generous lymph drainage well justify what Sturmdorf nicked, the "tonsil of the pelvis." Anatomically it is constantly exposed to infection in the form of vaginal flora. In adult, married women this means a wide variety of organisms including many pathogenic varieties. The extensive lymph drainage back into the sacral, iliac and inguinal glands permits ready access to the deeper tissues of the body, including the parametria.

The mere fact that, in the past, treatment of cervical infections appears to have resulted in little improvement in individuals with disease of infectious origin, means nothing. Why should it? Older methods of treatment characterized chiefly by surface applications of one antiseptic or another could scarcely be expected to affect the deep-seated focus in the branched cervical glands. Where treatment has been more radical, cause and effect relationship has been shown to exist. Perhaps the infected tonsil would be considered another innocuous focus playing no part in systemic disease if all we did was to paint it with some mild antiseptic. Even though conclusive proof is lacking there is abundant reason to believe the infected cervix plays quite as important a rôle in systemic disease of infectious origin as does any other body focus. Every diseased cervix should be evaluated from this point of view.

3. *As a cause of local symptomatology.*—The common lesions of the cervix are frequently associated with abnormal vaginal discharge, but leukorrhea is not the only local symptom. Itching, burning, frequency, bearing down sensations, dysmenorrhea are others which must be added to the list. Persistent unexplained low backache may be due to extension of infection from the cervical glands. Similarly dysparunia is not infrequently associated with cervical infection and secondary spread to the loose areolar parametrial tissues. Local symptoms associated with these common lesions may not be serious, but like the common head cold they cause untold annoyance and much genuine suffering.

4. *As a cause of sterility.*—Sterility is no problem to the average physician. For the average lay person sterility might prove a welcome change from the usual worry of pregnancy. To unfortunate women who cannot conceive, however, sterility is much more than an annoying incident. It is a serious affair of far reaching consequences. Study of this problem requires care and perseverance. Causes are numerous, not least significant of which are diseases of the cervix, particularly cervicitis. The gross evidence seen on inspection may appear insignificant, yet the thick tenacious mucopurulent discharge in the cervical canal proves an impenetrable barrier to the sperm. Excessive scarring and stenosis of the cervix also contribute to the causation of sterility. While the general practitioner seldom encounters sterility as a problem he nevertheless has a big responsibility in its prevention. To him falls the responsibility of curing disease of the cervix in its early stages, before permanent changes occur, some of which contribute to sterility later in life.

5. *As a cause of dystocia.*—The relationship between common cervical lesions and prolonged labor is seldom mentioned, yet in the presence of extensive tearing with cicatrix formation the cause and effect relationship is obvious. Less apparent, but quite as rational, is the slow dilatation of the cervix seen in primipara due to long standing low

grade infection with associated fibrosis of the cervix. Not only does the excessive connective tissue proliferation called out by the inflammatory process reduce normal elasticity of the cervix and prevent satisfactory dilatation but it also predisposes to more frequent and deeper tears.

Just how important cervical infections may be in sepsis following confinement remains to be seen, but it can be safely stated that, given a choice, no physician cares to see his patient come to term with active infection of the cervix. Pathogenic organisms have been isolated from cervical cultures. The potential dangers from this source warrant treatment, even during pregnancy.

Treatment.—Detailed consideration of the many adequate methods of treatment is not a function of this paper. Improvements over earlier methods are numerous. Whereas our predecessors had to choose between local application of antiseptics or surgery, the physician of today may choose from a presentable list the method of treatment most suitable. In so doing he can also assure his patient of better and more direct treatment with much less inconvenience and discomfort. Today many cervical lesions can be cleared up with two or three simple office treatments with the actual cautery with vast saving in time and effort for both patient and doctor. The more extensive lesions formerly requiring radical and often difficult surgery may now be treated just as effectively without prolonged hospitalization.

Attitude concerning common cervical lesions has changed. In its evaluation the careful examiner sees more than just an erosion, eversion, laceration, etc., as the case may be. *He envisions disease of tomorrow, located in the cervix and forecast by the often insignificant looking disorder before him.* With remedial measures no longer a problem, the thinking physician, mindful of the responsibility which is his, cannot fail to bring to his patient every ounce of prevention which is justly hers. Failure to do so means fumbling a great opportunity for prevention of disease in the female pelvis.

SANITARY CONTROL OF DISEASES WHERE ALCOHOLIC BEVERAGES ARE SOLD

C. H. BENNING, M.D.†

Director, Royal Oak Health District
Oakland County Department of Health, Michigan

ROYAL OAK, MICHIGAN

The wholesale growth, temporary or otherwise, of beer gardens, or defunct eating houses, hotels or barbecues, to take advantage of the present demand for beer and alcoholic beverages by the general populace, has created a real health menace.

This menace lies in the fact that a large proportion of the persons seeking licenses to open beer gardens and eating houses where beer, or other alcoholic drinks, are to be sold, are unfamiliar with what is meant by proper sanitary arrangements in such places and are also uninformed as to what constitutes a menace to the health of the people.

This lack of information is obviously more prevalent in rural areas than in cities and towns. Most large cities and towns have some form of health and sanitary supervision but up to the present time rural areas are lacking in this necessary control.

It is apparent then that a uniform minimum sanitary code should be drawn up and put into effect to prevent the totally unnecessary spread of various communicable diseases which can be transmitted by contaminated containers of glass or other material.

In the prevention of disease we often make the mistake of looking too far afield for the source, and neglecting everyday causes directly at hand.

Various companies and certain cities for some years have insisted upon the physical and bacteriological examination of food handlers. Unquestionably many sources of infection have thus been found and eliminated.

Attention has also been directed to the sterilization of eating utensils. In some cases these are washed clean but infected later by diseased handlers. A striking example of this was the epidemic of typhoid fever among university students at Madison, Wisconsin, in which a waiter who suffered from a walking case of typhoid fever, wiped and stacked dishes after they had been washed, and infected some forty-one persons.

In New York City an investigation of 1,981 foodhandlers in 1917 showed ten active and fifteen arrested cases of tuberculosis; nineteen active and thirty-two suspected cases of syphilis; and six cases of gonorrhea. Other examinations have revealed similar conditions.

It seems not only possible but probable that patrons of restaurants, beer gardens, etc., in rural areas especially, have been and will continue to be exposed to infection through such means.

It is said that in certain establishments where beer or other alcoholics are sold, glasses have nothing that can be called washing, but are simply rinsed, drained, and used again and again, sometimes without drying.

The mechanical dish and glass washer is coming into more or less general use in hotels and restaurants, and bacteriological examinations show that the results are much better than hand washing, except in those cases where the latter is done with extreme care, with hot water and soap and with clean and hot rinse water. When the rinse water is only lukewarm, there is absence of disinfecting action and in a short time it becomes rich in bacteria.

With hand washing the tendency, of course, is to use water which is not hot enough to scald the operator and consequently is of no value as a cleanser of utensils.

Recently a sanitary survey of beverage establishments in Lansing, Michigan, undertaken by Mallmann and Devereux of the Department of Bacteriology and Hygiene of Michigan State College, East Lansing,

†C. H. Benning, M.D., C.M., C.P.H., is a graduate of McGill University, Montreal, Canada, 1917. He received his certificate of Public Health at Johns Hopkins, Baltimore, Maryland, in 1925, and specializes in Public Health work. He was formerly with the State Health Department, Lansing, Michigan. He is a Fellow of the American Medical Association and American Public Health Association, member of the International Society of Medical Health Officers, secretary of the Oakland County Public Health Association, and secretary of the Metropolitan Health Officers Association. He was formerly Instructor in Bacteriology for Nurses at the St. Joseph's Mercy Hospital, Pontiac, Michigan.

brought to light the following insanitary conditions:

1. "Few establishments where beer or liquor was sold were attempting proper care in the handling of glassware.

2. "Few places in the entire city had satisfactory glassware.

3. "Many were not even provided with running water at the dispensing bar. Some were merely dipping the glasses in a pail of water which was changed at infrequent intervals.

4. "In a few, wash sinks were located in back rooms inaccessible to the bar.

5. "Appearance of the bar and the wash sinks showed plainly that even rinsing the glasses in water was a rare occurrence in some cases."

If such conditions could exist in the very capital of the state, what must be the case in outlying districts which have no sanitary or health supervision? Homer N. Calver, Fellow of the American Public Health Association, in an article entitled, "A Neglected Opportunity for the Control of Respiratory Diseases," published in the *American Journal of Public Health*, August, 1935, brings out clearly the dangers lurking in the lack of sanitation in food and drinking establishments.

"The control of respiratory diseases," says Calver, "through sanitary measures has seldom been tried thoroughly in a sustained program. While waiting for the laboratory to discover a readier measure of control, this may offer a fruitful means of attack. Sanitation as here considered means the establishment of procedures wherever possible to prevent the mouth discharges of infectious persons from being imbibed by others.

"The only important point at which the Health Officer has it in his power to interpose barriers to this salivary exchange is in his supervision of public places serving food and drink."

With the above reasons in mind, the following sanitary measures are suggested for beer gardens, restaurants, and places where alcoholic beverages are sold in rural areas

which do not come under a full time Health Department, or where no such ordinance exists even if a full time Health Department is in operation.

Suggested Sanitary Code

That, before any license is issued to any individual, firm or corporation to dispense beer or other alcoholic beverages in beer gardens, restaurants, barbecues, or other places so designated,

1. The person or persons who work in the above mentioned places must obtain a certificate of health from the Health Department, where one exists, or from some public health agency to be designated. This food handler's permit shall consist of an examination for venereal disease, tuberculosis, and any other communicable disease as might seem advisable. In addition, all workers in the above mentioned places must be examined to determine whether or not they are typhoid carriers.

2. The conditions existing in the beer garden, restaurant, barbecue, or other place designated, must be sanitary and arranged for the bodily well-being of patrons as approved by the Health Department, where one exists, or by some public health agency to be designated.

3. The washing facilities for glasses, dishes, or other eating utensils must be such as will be approved by the State Department of Health and local health authorities.

It is suggested that a qualified physician who is trained in public health and sanitation to be requested to advise on all matters regarding the sanitation of beer gardens and other places where beer is to be sold in rural areas, and that a committee be instructed to draw up a Sanitary Code which will meet with the approval of the State Department of Health.

This article is presented with the earnest conviction that a real menace to the health of the people of Michigan exists under present conditions in the majority of drinking places. These conditions are remediable at a cost not out of proportion to the benefit to be obtained.

MEANDERINGS IN OPHTHALMOLOGY*

LEO L. MAYER, M.D.†
CHICAGO, ILLINOIS

It is only a little more than eighty years ago that modern scientific ophthalmology began. In 1851 Helmholtz¹¹ described the ophthalmoscope and a few years later von Graefe's⁴⁵ Archives sprang into print. With the advent of this publication and others of its ilk, which were to follow, many of the basic principles of our chosen profession were brought to universal attention and recognition. Additions to our knowledge have been numerous of late years, so much so, at times, that it behooves us to pause and evaluate.

With your coöperation, it will be my purpose to bring to your attention, for discussion, various phases of our subject. For the most part the substance of the dogmatic statements made will be from my own teachings and experiences, substantiated as far as possible by experimental and clinical evidence submitted by authoritative sources. The practice of medicine consists in the knowledge of the art and the science of that complex human mechanism which is never alike in any two individuals. It is the duty of the physician to advise his patient both in a prophylactic and therapeutic manner as to those measures which have been cast aside as being found wanting as well as to inform him of the new and proven aids to the body's well-being. Boric acid is soothing for a short time, possibly five minutes at the most, but it has never been known to cure any eye condition. Theobald⁴³ in 1880, when boric acid was introduced, wrote in glowing terms of the new remedy and reported numerous satisfactory cures in conjunctivitis cases. Of course we know now that boric acid has a negligible germicidal power. Even the layman of average intelligence knows that the so-called eye washes advertised so extensively by each and every manufacturer of cosmetics depends on boric acid for its "eye-brightening" effect. Our efforts should be directed in explaining that the tears are the natural eye-wash and that infection or inflammation of the conjunctiva must be treated by an agent that removes the irritant, allays the irritation or kills or prevents growth of the bacteria causing the infection.

Argyrol has been used by ophthalmolo-

gists for about thirty years. As far back as 1906 Verhoeff⁴⁴ found that 12 per cent argyrol failed to kill staphylococci in one hour. Derby⁶ obtained abundant growth of *Staphylococcus aureus* after three and one-half hours exposure to 50 per cent argyrol and concluded that argyrol was almost inert but sterile and soothing. Post and Nicoll³⁷ found that after an exposure of one-half hour pneumococci were not killed by 50 per cent argyrol. However, Lancaster¹⁷ in 1920 published laboratory evidence which undoubtedly greatly influenced the acceptability of argyrol as an antiseptic for use in eye work. He concluded that it was "a powerful antiseptic as tested on staphylococcus aureus in serum or in salt solution or water." To demonstrate what influence Lancaster's opinion made I need only tell you that in the 8th edition of DeSchweinitz' text⁷ ten references are indexed under argyrol showing its use as an antiseptic. In 1923 Cheney³ was so disturbed by the difference in the conclusions of Verhoff and Derby on the one side and Lancaster on the other, that he reviewed the entire experiments of all of these men. He concluded that argyrol has a definite germicidal power *in vitro*, its continual use produces argyrosis, it does not keep well and has little if any power of penetration. Cheney said also that he did not wish to give the impression that he was an enthusiastic advocate of the use of argyrol. In some experimental work of my own, never published, I was able to show that 25 per cent argyrol is an excellent culture medium, and that even from a 50 per cent solution cultures of the ordinary pathologic conjunctival bacteria could be induced to grow after exposure of from one to three hours. Speaking of the silver protein compounds Gifford⁹ says, "Their bactericidal effect is very slight, and it is probable that their

*Read before the Southwestern Michigan Triological Society, at Kalamazoo, May 23, 1935.

†Dr. Leo L. Mayer is a graduate of St. Louis University Medical School, 1923; Zeugnis, University of Vienna, 1927. He is Instructor in Ophthalmology, Northwestern University, Chicago, and Ophthalmologist at Michael Reese Hospital, Chicago.

astringent effect is as well secured by the zinc salts, which are free from the danger of staining the cornea and conjunctiva." In spite of all this evidence it is not unusual to be asked to see a child or even an adult where the pediatrician or internist has prescribed argyrol to no avail and finally comes to one of us for help. The oculist who treats his patient with argyrol and gets a good result, in my opinion, would have had a cure by simply praying, as so many of these conjunctival infections are self-limiting. Those of you who are interested in ear, nose and throat work in addition to the eye will no doubt recall the recent report in the *American Medical Association Journal*⁸ of seventy cases of generalized argyrosis. I have never heard of a generalized argyrosis due to treating the conjunctiva and yet I cannot see any logical reason for using an inert and disfiguring drug. Even the organic silver salt has its disadvantages. But to this subject I shall refer later in discussing gonorrheal infections.

So far we have heard of two drugs which are useless as conjunctival antiseptics. In very recent years many new preparations have been introduced. Mercurochrome, merthiolate, S-T 37, and metaphen are apparently efficient in proper concentrations. However, my preceptor, Dr. Meyer Wiener, was able to demonstrate to me during a period of five years how very useful is the antipneumococci antiseptic, optochin hydrochloride in 0.5 solution. I am unable to give you definite data as to the reason for its efficacy but I have had the idea that in many conjunctival infections the pneumococcus is either the initial invader or as a secondary parasite exerts the predominating role of infective agent. It must be acknowledged that as far as remuneration is concerned this drug does not add to the cash register, for acute conjunctivitis clears quickly under optochin therapy.

I have always felt that the way to attack gonorrheal ophthalmia is at its source; thus the problem should be one for the obstetrician or the genito-urinary physician. However, these gentlemen for some unknown reason do not seem able to handle the situation properly and thus we see patients with gonococcus conjunctivitis. Lehrfeld²⁰ has lately re-analyzed the efficacy of the Crede method of instilling 1 or 2 per cent silver nitrate and concludes that it is better to in-

still a 0.5 per cent silver nitrate solution on four successive days. His figures show that in babies with ophthalmia neonatorum only 28 per cent were gonorrheal, the remainder being for the most part pneumococcal, due most likely to the irritating action of silver nitrate. He recommends sterilization of the birth canal before delivery and a change in the state laws to include prenatal antisepsis. In a previous paper on "The Technic of Nursing Ophthalmia Neonatorum" Lehrfeld²¹ stresses many points with which I am in entire accord and wish to bring again to your attention. It has always been my contention that any gonorrheal infection of the eye may be cured if during the first forty-eight hours of the disease proper care is given. This means that if drops are to be used, and I prefer a 5 per cent mercurochrome, it is very necessary to be sure the drop gets in the eye. Often in the new-born two or three nurses are needed to undertake this difficult maneuver. The upper lid must be everted and the upper cul-de-sac requires its share of the medication. Thorough flushing is of the utmost importance and depends not on the antiseptic property of the solution used but on the thoroughness with which the stream is able to cleanse the pus away. I hope none of you ever have an experience like I had last year where a graduate nurse was using an eye cup to flush out the conjunctival sac. Ice packs used frequently to reduce the swelling, and foreign protein therapy to raise the temperature and increase the antibodies aid materially in the treatment. In private patients I insist on two graduate nurses for day and night duty, and I tell the nurses the outcome of the eyes depends on them.

From time immemorial we have been warned that the use of a cycloplegic in individuals over the age of thirty may precipitate glaucoma. Most of us teach this idea to our students. Last year Abraham¹ made a statistical study of this problem and concluded from the answers to his questionnaire that the incidence of acute glaucoma following a mydriatic is one in 18,400 cases. Following the mydriatic if a miotic is used the number decreases. He finds that the incidence is increased by prolonged mydriasis, occurs seldom before the age of thirty and suggests that at least some cases would show signs of early glaucoma by special tests if carefully checked. It has been my

good or bad fortune to have seen in the past ten years four cases of acute glaucoma following mydriasis in unsuspected eyes. In none of these was there an unfortunate outcome up to the present writing although I must say that the course of most of them was stormy. It has been my custom to make the rounds of the medical wards at Michael Reese Hospital every Sunday morning for the past five years to enjoy medical ophthalmology with the interne's interest. Only one of these cases previously mentioned occurred in this large series. It seems to me that a person with unsuspected, insidious glaucoma is far better off if such is discovered by accident than if there was no evidence until very late when fields are greatly contracted and extensive atrophy has begun in the eye. I feel very definitely that too much is made of this question and that perhaps more patients with incipient glaucoma could be brought to their own and our attention.

Both Stokes⁴² and Moore³⁵ in their admirable texts acknowledge the beneficial effects of tryparsamide in syphilis of the nervous system. Yet both authorities emphasize that the drug should not be used when optic atrophy is present, and Moore puts his warning in italics. While the ophthalmologist is not called upon to treat syphilis, his advice is often sought to guard against optic atrophy. The numerous reports from the clinical evidence have been contradictory. I shall not take the time to review these reports, with which you are no doubt familiar. Lazar's¹⁹ report originated at Northwestern University, where he and I have continued to watch all patients under tryparsamide treatment, and although we have not as yet reported our findings it is obvious to me from this study and the previous report made in conjunction with Smith³³ that individuals with neurosyphilis treated by tryparsamide are rarely the victims of a complication involving the eye due to the drug. Two thoughts I shall leave with you. The first is the fact that the patient knowing of the possibility of danger to the eye is quite apprehensive and may easily be unduly influenced by suggestion. The second thought is the fact that in the use of almost any drug there are individual susceptibilities and idiosyncrasies. As far as I know, no one has as yet proven that tryparsamide in the dosage usually given is toxic to nervous tissue and I still feel "that

tryparsamide, intelligently administered, causes no increase in the atrophy of the optic discs, where syphilis has previously caused changes."³³

Our colleagues, the internists and likewise the pediatricians, have a viewpoint concerning tuberculosis which is, in a measure, contradictory to our ideas. To them, unless the patient has a demonstrable pulmonary lesion, there is no likelihood of active tuberculosis. I am not entirely satisfied that the ocular lesions of phlyctenulosis, nodular iritis and solitary tubercle of the choroid are due to the tubercle bacilli or whether they are allergic phenomena caused by toxic products of the organisms, but I am certainly sure of the fact that treatment with tuberculin cures these conditions. Many reports^{12,14,24,25,28} from tuberculosis sanatoria have all failed to show any of these ocular conditions in these patients with active pulmonary tuberculosis. Of utmost importance is the tuberculin test in patients with suspected ocular tuberculosis. If you do not do the test yourself but leave it to the general medical practitioner be sure to warn him that a very high dilution should be used in the initial tests. I have had the sad experience of leaving the dosage to competent medical consultants and have on one occasion lost an eye following too high a concentration in the skin test. I recently was asked to see a patient with chronic keratitis who had been under the care of two ophthalmologists and an extremely capable internist for some three months without benefit. In discussing the case with the internist I found that all the findings were negative except for the Mantoux test. This was markedly positive and even after one month the patient had a local residue of the reaction. "Why did you use the Mantoux test, if you paid no attention to it?" I asked of the internist. "Oh," said he, "we never pay any attention to that test in adults." And this from a man for whom I have the greatest regard. My results have been best with the preparation known as Koch's old tuberculin beginning with a 1 to 1,000,000 dilution and gradually increasing the dosage, always keeping under the dose causing a reaction. The only disadvantage I have found with old tuberculin is the fact that it is necessary to make up fresh dilution every month. We have used tuberculin in reactive eyes following cataract op-

eration with excellent results. Meller's³⁴ work in connection with Lowenstein's culture of the blood for tubercle bacilli has not as yet been adequately confirmed but it may lead to a better understanding of this entire problem.

Just one remark concerning detachment of the retina, as time will not allow of a thorough discussion of the so recent, abundant material. We are unusually fortunate in this country that the number of eyes with this unfortunate condition are few and far between. Thus it is that any one man sees relatively few patients with detached retina. Each, while listed under the same diagnostic index, is nevertheless different. The point I wish to stress is that each case needs a thorough investigation before operation is recommended. To cite one patient who was sent to me for consultation some six months ago. Four eye men had seen him before I did, two in St. Louis and two in Chicago. The doctors in St. Louis recommended operation, but as neither of them had attempted an operation they sent the patient to Chicago to a man who was reputed to have done quite a few of these operations. This man was out of town but his associate recommended immediate operation. The patient sought another physician who asked for my opinion. I found that patient with bilateral congenital ectopia lentis, many fine floaters in both vitrei which had been present for many years to the patient's knowledge. In the left eye below the dislocated lens involving the lower retina was noted what to me was a broad, flat, detached retina with exudate under it and no tear visible. I advised against an operation, said I would be afraid to chance it (and there is nothing I'd rather do than operate) and told the patient to go home, put himself under the care of his original ophthalmologist together with a competent internist and find out what was causing the exudate. I subsequently heard that the patient went to Los Angeles, where he had an operation and finally had to have the eye enucleated. My point is, beware of the flat, exudative detachment that may be due to localized choroidal disease. I am inclined to agree with Lindner²³ that the so-called idiopathic detachment is due to a diseased vitreous, as was indicated in my experimental work on the vitreous in retinal detachment.²⁹

The subject of orthoptic training has finally come into its own and promises great

things for the future. Much of this work is familiar to you. It will be my purpose simply to inject a few generalizations for you to keep in mind when the road seems rough in the conquest of a case of squint. In a period of three months time with patience and persistence on your part, with concentration and application on the part of the patient, and finally with the parent's unstinted coöperation, unquestionable progress should be easily demonstrated. If in this length of time the amblyopic eye has not enhanced its visual acuity and the angle of squint is not narrowed, then operation is indicated. The patient should be told two things about the operation. First, that it is done for cosmetic purposes only, and secondly that more than one operation may be necessary. In reviewing the instruments and methods for this training³⁰ I was and am still convinced that no single one is better than another but that as many as possible should be tried on each individual strabismus patient. The background and many of the methods for orthoptics are not new, as witness the text of Hansell and Reber written in 1912,¹⁰ but the appreciation of and efforts to overcome this defect are having a thorough try-out. We are learning daily and I find myself more and more often postponing operation even in adults until I have a thorough knowledge of the eye musculature and what orthoptic methods will accomplish.

From time to time each one of us sees a patient whom we have to advise that there is nothing further to be done to give him sight. It may be an opaque cornea, a keratoconus, a malignant myopia, a central or cæco-central lesion of the retina or an optic atrophy. At intervals, certain methods which are fortunately seldom needed should be recalled to mind lest we forget that such drastic and radical procedures are available in extreme affections. Transplantation of the cornea as discussed by Castrovieji²; resection of the cornea as devised by Wiener⁴⁶; the contact glasses of Muller³⁶ and Zeiss⁴⁷; the telescopic spectacles with their startling results²⁷; the shortening of the eyeball by Lindner's²² method; the resectioning of the carotid sympathetics according to Magitot²⁶—all these are methods of last resort in severe conditions.

As a fitting dessert to this hash-like repast which has been served up to you, I should like to conclude with a mention of

some of the newer tid-bits contributed to our specialty which have impressed me.

Jameson¹³ is advocating the use of thyroxin in certain eye conditions, where it may be assumed that the patient's general condition prevents an early and satisfactory outcome. The idea is that the hormone stimulates those factors so necessary for cure. He has had some very satisfactory results.

Selinger⁴⁰ has had excellent results with the local application of a 10 per cent quinine solution in both the treatment of trachoma and the removal of corneal opacification.

A preliminary report of a new method of perimetry by means of minimal light flashes has been published,³² and this method has demonstrated to me an easy, more accurate and untiring technic which bids fair to make this examination one of routine in office practice.

Lauber¹⁸ has called our attention to the work accomplished by his associates⁴¹ concerning the relation of intracranial and retinal intravenous pressure. These workers are of the opinion that measurement of the pressure in the retinal vein is a direct indicator of what is occurring in the cranial cavity. If this hypothesis is confirmed it may be a big step forward in the diagnosing of intracranial affections.

Two Russian authors¹⁶ have found that a one per cent alcoholic solution of brilliant green is effective in ulcerative blepharitis. While we rarely see cases of this stubborn condition, at times it has responded well to such therapy. Coppez⁵ has made a decided advancement in the type of electrode to be used for retinal detachment. By an ingenious device the temperature of the fulgurating needle is known at all times. Dr. Arnold Knapp¹⁵ of New York recently made a study of the various methods used in detachment of the retina in the European Clinics, and his enthusiasm for this new electrode of Coppez recommends it very highly.

Ruedemann³⁸ believes that a study of the conjunctival vessels and their reactions in health and disease will add much to our knowledge of ocular conditions. We are awaiting with great hopes his further reports.

Again the subject of tinted lenses has come up for analysis. Coblentz⁴ has definitely decided for us that up to the present

time the manufacturers of these colored glasses have no basis whatsoever to recommend their use. Wide angle lenses have also received their share of criticism.

The injection of the patient's own blood into the anterior chamber for tuberculous iridocyclitis as proposed by Schieck³⁹ has found many advocates and indeed seems to have a definite place in our armamentarium of treatment for such resistant conditions.

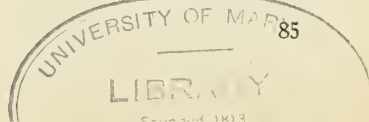
More and more, because of the new trend in educational methods, where the teaching of the alphabet is a thing of the past, we are seeing those misguided children with partial word blindness.³¹ Labeled mental defectives, which they are not, they are usually grouped with the feeble-minded, and allowed no chance to achieve the excellent prognosis which we have come to know is their just due. With the dissemination of the knowledge of this curable condition it is to be hoped that educators will give proper recognition to the possibilities of these wayward children.

Time and space does not permit of further additions to this pot pourri of interesting eye subjects.

104 South Michigan Avenue

Bibliography

1. Abraham, S. V.: Mydriatic glaucoma. *Arch. Ophth.*, 10:757, 1933.
2. Castroveijo, R.: Keratoplasty. *Am. Jour. Ophth.*, 17: 932, 1934.
3. Cheney, R. C.: The bactericidal power of argyrol. *Am. Jour. Ophth.*, 6:649, 1923.
4. Coblentz, W. W.: Tinted lenses; the present deal. *Jour. A. M. A.*, 102:1223, 1934.
5. Coppez, L.: Detachment of the retina. Treatment by means of the pyrometric electrode. *Arch. Ophth.*, 13:1, (Jan.) 1935.
6. Derby, G. S.: An experimental study on the bactericidal power of various silver preparations. *Boston Med. and Surg. Jour.*, 155:341, 1906.
7. de Schweinitz, G. E.: *Diseases of the Eye*. Philadelphia: W. B. Saunders Co., 1917. Pages 165, 193, 195, 200, 202, 223, 240, 252, 570, 625, 664.
8. Gaul, L. E., and Staud, A. H.: Clinical spectroscopy. *Jour. A. M. A.*, 104:1387, (April 20) 1935.
9. Gifford, S. R.: *Ocular Therapeutics*. Philadelphia: Lea and Febiger, 1932, page 45.
10. Hansell, H. F., and Reber, W.: *The Ocular Muscles*. 2nd edition. Philadelphia: P. Blakiston, 1912.
11. Helmholtz, H.: *Beschreibung eines Augenspiegels zum Untersuchen der Netzhaut im lebenden Auge*. Berlin: A. Forstner, 1851.
12. Jackson, E.: Tuberculosis as a focal disease. *Jour. A. M. A.*, 74:7, 1920.
13. Jameson, P. C.: Use of thyroxin in ophthalmology. *Arch. Ophth.*, 12:635, 1934.
14. King, C.: The therapeutic value of tuberculin in ophthalmology. *Arch. Ophth.*, 1:713, 1929.
15. Knapp, A.: Address delivered before the Chicago Ophth. Soc. at its annual meeting, January, 1935 (not yet published).
16. Krilov, T., and Postovtzev, B.: Treatment of blepharitis with brilliant green. *Sovetskii Vestnik Ophth.*, 4:501, 1934 (part 5).
17. Lancaster, W. B.: *Argyrol*. Boston Med. and Surg. Jour., 183:565, 1920.
18. Lauber, H.: The formation of papilledema. *Arch. Ophth.*, 13:733, (May) 1935.
19. Lazar, N. K.: Effect of trypanamide on eye. *Arch. Ophth.*, 11:240, 1934.
20. Lehrfeld, L.: Limitations of silver nitrate in ophthalmia neonatorum. *Jour. A. M. A.*, 104:1468, (April 27) 1935.



21. Lehrfeld, L.: The technique of nursing ophthalmia neonatorum. *Trained Nurse and Hosp. Rev.*, 92:34, 1934.
22. Lindner, K.: Heilungsversuche bei prognostisch ungünstigen Fällen von Netzhautabhebung. *Ztschr. f. Augenh.*, 81:277, 1933.
23. Lindner, K.: Zur Entstehung der Glaskörperabhebung. *Klin. Monatsb. f. Augenh.*, 94:385, (March) 1935.
24. Lowenstein, A.: Die Tuberkulose des Auges. Berlin: Urban and Schwarzenberg, 1924.
25. Luedde, W. H.: The significance of the tuberculin reaction. *Am. Jour. Ophth.*, 6:161, 1922.
26. Magitot, A.: La Sympathectomie carotidienne comme thérapeutique de certaines affections dégénératives du nerf optique et de la rétine. *Bull. Acad. de Med.*, 111: 816, 1934.
27. Mayer, Leo L.: Further visual results with telescopic glasses. *Arch. Ophth.*, 2:351, 1929.
28. Mayer, Leo L.: Tuberculous lesions of the eye in active pulmonary tuberculosis. *Jour. Missouri Med. Assn.*, 28: 318, 1931.
29. Mayer, Leo L.: The vitreous in experimental detachment of the retina. *Arch. Ophth.*, 7:884, 1932.
30. Mayer, Leo L.: Modern developments in orthoptic training. *Arch. Ophth.*, 8:888, 1932.
31. Mayer, Leo L.: Congenital reading disability—strophosymbolia. *Jour. A. M. A.*, 100:1152, 1933.
32. Mayer, Leo L.: Perimetry with stimuli of minimal duration. *Proc. Soc. Exper. Biol. and Med.*, 32:219, 1934.
33. Mayer, Leo L., and Smith, R. D.: Ocular manifestations in trypanamide treatment of syphilis. *Illinois Med. Jour.*, 65:258, 1934.
34. Meller, J.: Nachweis von Tuberkelbazillen bei Uveitis durch Kultur aus dem Gewebe des Augeninnern. *Ztschr. f. Augenh.*, 77:1, 1932.
35. Moore, J. E.: The Modern Treatment of Syphilis. Springfield, Ill.: C. C. Thomas, 1933.
36. Müller (see Heine, L.): Über den Ausgleich sämtlicher Brechungsfehler des Auges durch geschliffene Haftgläser. *München. Med. Wchnschr.*, 77:6, 1930.
37. Post, W. E., and Nicoll, H. K.: The comparative efficiency of some common germicides. *Jour. A. M. A.*, 55:1635, 1910.
38. Ruedemann, A. D.: Conjunctival vessels. *Jour. A. M. A.*, 101:1477, 1933.
39. Schieck, F.: Die Ergebnisse der Eigenblutinjektionen in die vordere Kammer bei Tuberkulose des vorderen Bulbusabschnittes. *Klin. Monatsb. f. Augenh.*, 90:1, 1933.
40. Selinger, E.: Local quinine therapy in trachoma. *Am. Jour. Ophth.* (to be published).
41. Sobanski, J., and Szczeniowski, J.: The relation of the intraocular venous tension to intracranial pressure. *Klinika Oczna*, 11:369, 1933 (part 1).
42. Stokes, J. H.: Modern Clinical Syphilology. Second edition. Philadelphia: W. B. Saunders, 1934.
43. Theobald, S.: Boracic acid, a new remedy in eye diseases. *Med. Record*, 17:140, 1880.
44. Verhoff, F. H.: A further note on the antiseptic properties of sodium aurate. *Jour. A. M. A.*, 46:1462, 1906.
45. von Graefe, A.: *Arch. f. Ophth.*, 1:1854.
46. Wiener, M.: Surgical Removal of Corneal Opacities, Contributions to Ophth. Science (Jackson's Birthday Volume). Menasha, Wis. G. Banta Pub. Co., 1926, page 193.
47. Zeiss (see Duke-Elder, S.): Recent Advances in Ophthalmology. 3rd edition. Philadelphia: P. Blakiston's Son and Co., 1934, page 258.

MEDICAL PRACTICE IN SWEDEN*

B. H. LARSSON, M.D.†
DETROIT, MICHIGAN

State medicine was established in Sweden as early as 1662. In that year a royal decree authorized the Medical College in Stockholm to exercise complete authority over all people practicing the healing art. This included the physicians, barber surgeons, stone and hernia cutters, oculists, chemists, bathers, masseurs, dentists and apothecaries. The State Government appointed a governing body which has become known as the Medical Government. This has gradually crystallized into its present form with a set-up about as follows:

A director general and five medical councillors. The director general and four of the councillors must be legitimate physicians, and one a veterinary. The department is further served by one secretary, one registrar, three notaries, two auditors and one cashier. Besides there are: one prosecutor, one representative, one chief inspector for mental diseases, one controller of hospitals, one chief architect and a number of clerks. For bacteriologic examinations

and medico-legal investigations there is a State Medical Institute.

Management and Control

The Medical Government has complete control over public health matters as well as the care of the sick; everything concerned with medical service comes under its authority. It has control over all who practice the healing art as well as pharmacy. The only exception is that of University professors as such. It governs the country's asylums and the care of the mentally ill; it also has control over all general hospitals, baths, spas, and other curative institutions. The pharmaceutical, dentistry, midwifery, veterinary professions, medical gymnastics and massage institutes are all included under the authority of the Medical Government. The Medical Government is required to furnish information that is necessary to carry

*The writer of this article has been invited on several occasions to write or speak on the subject. He has invariably declined for fear of becoming accused of seeking to reform our own status of practice or import something which could not easily be applicable to this vast country. In the spring of 1935 a symposium was given on foreign medicine at a regular monthly staff meeting of the surgical staff of Harper Hospital. The writer presented the Swedish side essentially as given in this article.

†Dr. B. H. Larsson is a native of Sweden. He graduated from the Wayne University Medical College in 1914, and served internships at Herman Kiefer and Providence Hospitals. He was a member of the Medical Corps, U. S. Army, 1917-1919, with continuous service in France and Italy. He took postgraduate studies in Paris and Stockholm and was surgical assistant to Dr. Roland Parmeter 1920-1932. At present he is engaged in private practice and is a member of the Surgical Staff of Harper Hospital.

on the function of courts, to assist in solving medico-legal problems and other technical details for the community and public authorities. Finally it supervises the care and prevention of epidemics, infectious diseases, methods and control of smallpox vaccination.

Drugs and other pharmaceutical products, including prices, are under control by the same government. Price levels are revised annually by aid of pharmacists. Drug stores are regulated in proportion to population; they deal only with medical supplies. In a general way the system resembles markedly our Army Medical Service.

Ratio of Physicians to Population

In 1925 there were 2,014 registered physicians in Sweden. Of these, 1,236 were civilian government physicians, 681 were in private practice and 97 were not in practice. In cities there were 1,347 physicians, while 570 practiced in the country. In Stockholm the ratio of physicians to population is the highest, one to 822, in contrast to one to 3,150 in the country as a whole. In Stockholm, where is concentrated the greatest wealth of the country, are the greatest number of privately practicing physicians, the ratio being 284 private to 222 government physicians.

The Cost of Medical Care

The cost of medical care is covered by taxation to the extent of 80 per cent of the entire cost. To be exact, in 1925, 21 per cent of the population paid for their own medical care. Of civil patients in military hospitals, 16 per cent paid their own expenses. The balance was paid for by the community and State Government. The average cost per patient per day in 1925 was \$1.80. This does not include expenses for additional buildings or reconstructions.

Separate Services

Regarding the different medical services, the following may be said:

Venereal Diseases.—The law requires that venereal disease be combated by prophylaxes, education in sex hygiene and treatment. It provides: (1) Medical care either in hospitals or by ambulatory treatment for all patients suffering from venereal disease; (2) the privilege of obtaining the necessary treatment free of charge; (3) that it is the duty of patients to ob-

serve the plans and treatments as given by the physician; (4) a system of instruction and public enlightenment of the problem. There has been a great reduction in the incidence of venereal diseases since this law became effective in 1919. During that year there were reported 5,823 new cases of syphilis; in 1924 only 850. In 1919 there were reported 18,471 new cases of gonorrhea; in 1924 only 10,299. The more effective means of combating syphilis than gonorrhea explains the more favorable figures in that disease. It is believed by the authorities that the most important reason for the general improvement is due to free treatment. Prostitution, under medical control, was discontinued in 1919 by the same law which provided for compulsory treatment of venereal diseases. Neglect on the part of the patient is punishable by fine or imprisonment.

Tuberculosis.—This disease is rather prevalent in Sweden, like in most countries situated far north. Due to an intensive anti-tuberculosis campaign there has been a very marked improvement in the death rate. The local as well as State Government is behind both the educational and curative work. In addition there are four national sanatoria located so as to be geographically of the greatest advantage. These are financed by a five million crown fund which was donated by King Oscar II in 1897 in memory of his twenty-five year reign. The sum was collected by public subscription as a gift to the King, who in turn decided to use it for this purpose. In addition to the above, the anti-tuberculosis work is efficiently and effectively carried out through the means of special dispensaries, polyclinics and visiting nurses. All of these agencies are supported by the government.

Acute Infectious Diseases.—These cases are required to be reported at once by the attending physician and are hospitalized in so-called Epidemic Hospitals without cost to the patient. The so-called carriers of infectious diseases are also isolated in these hospitals and cared for at government expense.

Status of the Physician

The State Medical Service is conducted by physicians who are engaged and paid by the communities and State Governments. Some of these physicians are full time men giving their service to general hospitals or to tuberculosis sanatoria. The

general hospital physicians are paid by the local community which they serve, like a city, town, or county. The sanatoria physicians are paid partly by the local and partly by the State or Federal Government since the care of tuberculosis cases is considered a national responsibility as well as a local one.

The greatest number of physicians, however, are not attached to the hospitals but are general practitioners known as provincial and city physicians. The entire country is made up of twenty-four provinces, corresponding in a sense to our states, though much smaller. In each province are the first provincial physician and extra-provincial physician, a matter of grading in accordance with length of service. In the city we have chief city physician and city physicians who are charged with the same responsibilities as the provincial physicians. These physicians are paid according to a graded scale decided by the Medical Government. In addition the towns and smaller communities have physicians and pay them according to a universal scale.

The General Hospitals

Below is a very general view of the function of a General Hospital in Stockholm; a typical city hospital. It represents the financial report as part of the annual report to the city council. The report is very comprehensive in scope; it is printed annually and covers the major activities of the hospital. The name of the hospital is Mary's Hospital; the report is for the year 1931 and is signed by the director, Dr. Einar Key. The capacity of the hospital is 241 beds. Of these 105 are medical, 136 surgical. Total admittance during the year was 4,371, of which 1,779 were medical, 2,719 surgical. Of those admitted 236 died, a little over 5 per cent. The average number of patients per day was 249.9, of which 105.6 were medical, 144.3 surgical. The highest number of patients on any day was 304, the lowest 175. The average length of stay in the hospital was 20.9 days, the medical cases averaged two days longer than the surgical. The charge per patient per day varied: for private rooms, \$1.00 to \$4.00; semi-private \$0.50 to \$3.00; ward beds entirely free or from \$0.25 to \$2.00 per day. Of the total 4,371 patients admitted, 19 per cent or 816 were free.

The expenditures for the year totaled

\$253,550. Of this amount \$80,473 was collected for beds or polyclinic fees. The balance, or about two-thirds, was paid by the city. The total expenditures included additions to buildings, repairs and maintenance of buildings and apparatus, medical supplies, ambulance service, funeral expenses, chaplain and organist services, plus all salaries paid to staff, nurses and labor—the only exception being that the chief surgeon is paid by the University Medical School where he is professor of surgery; as director of the hospital he receives only a very small compensation from the hospital. By including all the above items in addition to buildings, property maintenance, et cetera, the total cost per patient per day is \$3.55. By excluding these items the cost for the actual medical care becomes \$2.25 per patient per day.

Pay of Trained Personnel

Concerning the remuneration paid the staff and trained personnel we quote these figures: the director, \$300, but he receives his actual living income from the University as professor of surgery, which amounts to \$3,000 plus compensation for quarters, heat and light. The residents in surgery, medicine and roentgenology receive \$2,000 each. The assistant resident surgeon, \$1,200; the assistant resident physician, \$750. The seven house physicians receive \$1,400. This staff receives in addition quarters, food and laundry. The electro-cardiologist, \$500, the pathologist, \$1,000. None of these are residents. The chief operation room nurse and the roentgen department nurse receive \$750 each plus quarters and maintenance. The nineteen trained hall nurses \$600 each plus quarters and maintenance. Extra nurses receive the same. Laboratory technicians, \$600 plus maintenance. In addition there are three period increases ranging from \$75 to \$150. The resident chiefs of the departments are allowed to charge nominal fees for services rendered out of town patients. This means that a patient coming from out of town is charged full amount for bed and professional services. The director of the hospital, also professor of surgery at the University, is allowed to carry on a limited private practice. He is non-resident but owes his first duties to the hospital and teaching. The entire personnel enjoys security for old age by a system of pensions in accordance with position held

during active years. In each of the twenty-four provinces is a main central hospital. It is run about the same as the one described above with the difference that the cost is proportionately lower and the personnel receives lower rates of remuneration. A very comfortable home usually adjoins the hospital for the chief surgeon and his family. He is always a full time man.

Cost to the Patients

In deciding the different rates to be charged a patient admitted to the hospital, the following procedure is generally practiced. The public requiring the hospital service is divided into these three income classes. The indigents who are paid for the welfare department at the very lowest rate; the lower income class, up to a certain average annual income which is known through the department of taxation. These are also charged the lowest rate: about \$0.35 per day. The second class, or the great middle class whose income is limited and known through tax records, pay a rate of about \$0.55 per day. The remaining class, the people who live in relative comfort, pay the highest rate of about \$1.00 per day. After thirty days in the hospital there is a proportionate discount in rates for all classes; these are all for ward beds. There is a difference in charge for private or semi-private rooms. Also, patients coming from another province are charged proportionately higher; in other words the full cost of hospitalization. This applies to the country as a whole rather than the capital cities. The larger hospitals have well run polyclinics. A first charge is made of \$0.55 and after that \$0.30 for each treatment. After ten treatments there is no further charge. Those who can qualify as indigents are cared for entirely free.

Ambulance Service

The transportation of seriously ill patients to hospitals is usually taken care of through an ambulance service which is run by the fire departments at the expense of the local government. In the larger cities there are in addition private ambulance services. As early as 1923 airplane ambulances were used to transport seriously ill patients to hospitals, especially from the northern parts where roads are poor and distances great.

Cancer Control

For the study, control and treatment of

malignant tumors, Sweden has exceptional facilities. The central institute, located in Stockholm, is known as Radiumhemmet. It was established in 1910 by the surgeon, John Berg, and its present director, Gösta Forssell. This is the centrum for all radiotherapy in Sweden. It has complete facilities for research, diagnosis, treatment and statistical studies of malignant diseases. It is maintained by funds contributed by the city of Stockholm, the State Government and private donations. The largest of these is the million and a quarter dollar fund known as the King Gustaf Jubilee fund which was subscribed to by the entire population in honor of the King's seventieth anniversary. There are two smaller radiotherapy institutes in southern Sweden, each controlling 1.5 gms. of radium. The Radiumhemmet controls about 5 gms. of radium and has complete installations for roentgen therapy. It has an elaborate staff of highly qualified men who carry on the work in an efficient manner and are in close contact with the entire medical profession of the country. This has encouraged a lively interest in the cancer problem and early diagnosis of the disease. The system of follow-up and statistics is very good as illustrated by the following figures: from 1914 to 1928 there were 1,644 patients treated for carcinoma of the uterus. The outcome of each case is known. From 1921 to 1928 there were 255 breast cancers treated. Of these only two were lost track of, one having emigrated to the United States. A polyclinic is connected with the institution. The cost for ward beds is \$1.00 per day; for private rooms, from \$3.50 to \$4.50 per day. The average fee for radium treatment for ward cases is \$1.25; for deep roentgen therapy \$0.75 to \$1.50. Patients unable to pay their way are furnished transportation by the government. Their local home governments pay half of the cost of the bed and treatments, the balance is furnished by the cancer fund. The referring physician is given every coöperation and kept informed about the patient's progress on special report cards.

Maternity Service

The obstetrical service is rendered principally through midwives. These are trained in two institutions for midwifery, one in Stockholm, the other in Gothenburg. The course takes two years and approxi-

mately sixty midwives graduate annually. The entire training is conducted at the expense of the State Government. At least every ten years a midwife is obliged to take a two-week postgraduate refreshing course, either at a special hospital or at one of the teaching institutions. For this she receives special remuneration as an encouragement. The entire country is divided into 2,000 obstetrical districts, each area depending upon the rate of population. In each province is a board of obstetrics, the chairman of which is the first provincial physician. There are strict rules governing when or where a special surgeon should be called when complications occur. The district midwives receive a base pay by the State and local community and the fees are according to the ability to pay or entirely free. The care of the newborn is also one of the duties of a midwife. Old age security is provided for by a pension system as for the medical profession.

Cults

The proper training by the government of sick gymnasts and masseurs has prevented the appearance of cults and irregular healers to a large extent. In the out-of-the-

way places, however, there is quackery to deal with as in most countries throughout the world.

Conclusions

This represents in a general way the present system of medical practice in Sweden. It is a system which apparently is well adapted to a small country of a homogeneous people. The system is sufficiently flexible to become adapted to the changing economic trends, and still be satisfactory to the profession and public alike. Sweden has a population of approximately six and one-half million people; a homogeneous race which has inhabited that large northern peninsula for more than 10,000 years. It is the oldest country in Europe which has been continually inhabited by the same race. It has been a unified kingdom for 1,200 years. Its laws, quoted from Agnes Rothery's recent book on Sweden, "help to promote health and give education to every child, to control its powerful men, and strengthen his weaker brother."

Bibliography

- Jacobeus, H. C.: Personal communications.
Key, Einar: *Arsberattelse*. From Maria Sjukhus, 1931-1933.
Rothery, Agnes: *Sweden, The Land and the People*.
Von Koch, G. H.: *Social Handbook*.

PREVENTION OF CANCER*

F. G. H. MALONEY, M.B. (Tor.), F.A.C.S.†
IRONWOOD, MICHIGAN

The present day methods of treating cancer by means of surgery, x-ray, and radium have probably reached their peak of perfection and will be difficult to improve upon until the actual activating agent in the production of cancer has been found. Efforts to reduce the mortality rate have been directed toward making earlier diagnosis before spread and distant metastasis have occurred. Considerable progress in this direction has been made, but, as yet, the field of prevention of cancer has been more or less neglected although it gives promise of great possibilities.

The purpose of these remarks today is to call your attention to a few of the many definitely established precancerous lesions and point out how the alert physician may lower the incidence of cancer by recognizing and removing these pre-cancerous hazards.

Cancer has attained a very important place in the lives of American people. It

ranks second as the cause of death in the United States registration area and, according to statistics, approximately one person in each thousand dies of cancer annually. The general public and a considerable number of practitioners do not yet realize that a very large percentage of these cancer deaths is preventable. To a certain extent cancer is a preventable disease. Certainly there is a stage in the life history of practically every cancer in which it is curable. Then why does cancer rank second as the cause

*President's Address at the thirty-eighth annual meeting of the Upper Peninsula Medical Society, Iron Mountain, Michigan, August 15-16, 1935.

†Dr. F. G. H. Maloney is a graduate of the University of Toronto, 1924. He held a Surgical Fellowship at the Mayo Clinic 1925-1928. His practice is limited to diagnosis and surgery.

of death in the United States? There are several answers to that question but, allowing for the silent nature of early cancer growth, perhaps superstition and ignorance on the part of the general public and lack of knowledge or lack of initiative on the part of the general practitioner would cover most of it. Up to a very short few years ago, the public spoke of cancer in hushed voices and it was almost considered a family disgrace to have a member of the family succumb to that dread disease. It was the general custom of the doctor to hide the diagnosis from the patient. This attitude was probably justified because the patient and his doctor only knew and recognized cancer in the advanced hopeless stages. Textbooks described the symptoms of cancer to be anemia, loss of weight, palpable tumor, enlarged glands, etc., and the recent graduate had only seen the typical textbook hopeless type of case in the wards of the medical school. He knew no other. However, under the guidance and teaching of such well known cancer research workers as Bloodgood, Ewing, and others, cancer has emerged from that cloak of ignorance and superstition which formerly surrounded it. While the exact cause has not been found a great deal of practical information has been learned about cancer. It has long been a popular belief, both in and out of the medical profession, that cancer was caused by some mysterious ultra-microscopic germ or virus. Extensive research has failed to discover this germ and the best medical opinion of today supports the view that, while the exact exciting stimulant to cancer growth is still unknown, the essential underlying cause of cancer is long-continued chronic irritation of a physical, chemical, or inflammatory nature. This hypothesis brings a large number of cancer growths within the field of preventive medicine. Research and long observation have shown that many common chronic irritations are definite forerunners of cancerous growths and have been designated as precancerous lesions.

There may be some confusion as to exactly what is meant by the term pre-cancerous lesion. In general, the term indicates a benign lesion which experience and observation have shown to have the possibility of becoming malignant, although such change is not necessarily inevitable. In other words, carcinoma develops often enough in

such benign lesions to warrant the designation precancerous. Such lesions are numerous and of many different types. Included among these are many of the very common everyday conditions which the general public and many physicians consider harmless and to which they give little heed. Hyperkeratosis of the skin, leukoplakia of the mucous membrane, pigmented moles, cracks and fissures about the lips and tongue, chronic infection of the cervix, and small nodules in the breast are a few of the painless, often unnoticed, benign lesions to which little attention is given, yet these so-called benign lesions are the forerunners of cancer in a large percentage of cases. To recognize and remove such lesions is a real step in attacking the cancer problem and in preventing a large number of certain types of cancer.

The general practitioner plays a most important role in cancer prevention. He must be "cancer-conscious," so to speak, and be on the lookout for precancerous lesions in his daily contact with his patients. If such lesions be found, it is his duty to impress upon the patient the dangerous nature of the lesion, and see to it that it is removed or corrected. By advocating annual physical examinations to his adult patients with the idea of preventing cancer, as well as other conditions, the alert general practitioner will aid materially in reducing the high annual cancer mortality. Bloodgood has gone on record as advocating annual or even semi-annual pelvic examinations of all women who have borne children with the idea of preventing cancer of the cervix. He considers this just as necessary a prophylactic measure as the giving of toxoid injections to young children to immunize them against diphtheria.

As everyone knows, there is no simple blood, urine, or skin test to reveal the presence or absence of cancer. However, with the instruments at hand today, a fairly accurate diagnosis of early cancer can be made if the presence of a newgrowth is suspected and looked for. The main thing is to keep the possibility of cancer in mind and look for it before it has advanced to the stage where its presence is obvious. It stands to reason that if a physician is cancer-minded and on the lookout for pre-cancerous lesions in his daily contact with his patients, that he will discover an occasional

early cancer in the stage in which it is curable.

While the entire scope of pre-cancerous lesions is far too extensive to be included in these remarks, I shall point out a few of the more common ones which the general practitioner sees daily.

Cancer is more common in the female sex than in the male. Death statistics show that in 1930 over 11,000 more women died of cancer than men. The reason for the difference in the two sexes is that the reproductive organs and the breast are very common sites for cancer growth in women. Again quoting the 1930 death statistics, nearly 25,000 women died of cancer of the breast and uterus combined. The astounding fact is that the uterus and breast provides the most likely fields for the prevention of cancer, and many of these deaths could have been prevented. The danger of a lump in the breast has been preached to the public and medical students for the past two decades but how many physicians include palpation of the breast as a routine in their examination of female patients; how many physicians have the possibility of a pre-cancerous lesion of the breast in mind during the examination of women patients. It is a well known fact that carcinoma may develop in a previously benign or innocent tumor of the breast. It is also well known that carcinoma cells may be present in what clinically appears to be a benign or innocent nodule. It is impossible to make a clinical diagnosis regarding early malignancy of the breast without removing the entire tumor and examining it microscopically. Removal of a small nodule in the breast is a comparatively minor operation with practically no risk and, as a general rule, most women will gladly undergo such operation if the situation is adequately explained to them. The alert physician who includes examination of the breast in the routine examination of his women patients with the thought of a possible precancerous lesion being present, and, if such a lesion is found, sees that it is properly removed and microscopic examination made, performs an inestimable service to his clientele. If the tumor proves to be benign no one can accurately foretell whether or not carcinoma would have developed but the hazard is removed, and, if this practice were general among physicians, the incidence of carcinoma of the breast would be materially reduced. On the other hand

if the apparently benign lump in the breast proves to be an early carcinoma the patient has an excellent chance of permanent cure by radical operation, thanks to its early discovery. The general practitioner has an unequaled opportunity of discovering the early unsuspected carcinoma of the breast if he will but keep the possibility in mind when he examines his women patients for other complaints. If a carcinoma of the breast is undiscovered until large enough to attract the patient's own attention, the chances of axillary involvement are over 50 per cent. Stout, in his monograph on human cancer, states that in a large series of his cases metastases were present in 53 per cent of cases operated one month or less after first discovered.

Cancer of the cervix is another very common cause of death among women which enters the field of prevention in a large number of cases. This type of carcinoma is notoriously a disease of women who have borne children, the incidence being placed at 98 per cent, 97 per cent, and 90 per cent by such well known gynecologists as Cullen, Sampson, and Graves respectively. The essential difference between the cervix of the woman who has borne children and one that has not is that the cervix of the former has been subjected to the trauma of childbirth with inevitable stretching, laceration and, in many cases, subsequent endocervicitis, erosion, eversion, et cetera. It is the chronic irritation of these unhealed cervical lesions that is believed to be the precursor of malignant change in the cervix of the parous woman. Many of the most noted authorities of today (Ewing, Bloodgood, Davis, TeLinde and others) consider endocervicitis, erosion, etc., to be a definitely precancerous condition. Complete eradication of these chronic inflammatory lesions of the cervix is a definite prophylactic step in the prevention of cancer of the cervix as is shown by many convincing reports of several well known gynecologists.

Smith and Pemberton report a series of 1,408 cases, and Bartlett and Smith a series of 1,700 cases of endocervicitis treated by cauterization in which not one was known to have developed subsequent carcinoma of the cervix. Hunner reports a series of 2,695 cases of chronic endocervicitis treated by either cauterization or amputation, not one of which had developed carcinoma ten years later. On the other hand, Bartlett and

Smith report a series of 673 cases of carcinoma of the cervix in which only one had received previous cauterization. In a series of 926 cases of malignancy of the cervix Johnson and Tyrone report that only ten had previously received some type of repair of the cervix including cauterization, trachelorrhaphy or amputation.

The evidence just quoted is sufficient to show that many cases of carcinoma of the cervix can be prevented. The important point is that every married woman should have a speculum examination of the cervix included in the routine physical examination, and any chronic infection of the cervix adequately treated and eradicated as a prophylactic measure.

The manner of treating chronic endocervicitis is important. Time and experience have shown that topical applications in the treatment of the chronically infected cervix are most ineffectual. There are three very efficient methods of treating this condition, namely, trachelorrhaphy, electro-coagulation, and electric cauterization. Trachelorrhaphy requires hospitalization and an anesthetic and is thus generally contra-indicated unless the patient requires other coincident surgery. Electro-coagulation is an office procedure which gives excellent results. However, the apparatus required is expensive, and the majority of general practitioners do not possess the necessary diathermy machine. The electric hair-pin cautery is a comparatively inexpensive apparatus requiring ordinary skill in application. Cauterization of the infected cervix can be done as an office procedure without an anesthetic, and, with the proper technic, the cervix will be entirely healed within six weeks.

Cancer of the lips, tongue, gums and oral cavity are a very important group of neoplasms which occur chiefly in men and, to a certain extent, enter the field of preventive medicine. It has long been recognized that these carcinomas are frequently incited by chronic irritations occurring over a prolonged period of time and are intimately associated with leukoplakia secondary to heavy tobacco smoking, syphilis, and chronic irritation set up by irregular or jagged teeth, poorly fitting plates, bridges, et cetera.

Leukoplakia is a hyperplasia of the mucosal epithelium with heaping up of the superficial layers to form thick white

patches or plaques and is comparable to the hyperkeratosis of the skin. This leukoplakia frequently occurs on the mucous membrane of the lip, tongue, gums, cheek, et cetera, and is the most important precancerous lesion in and about the mouth. Another important precancerous lesion is a fissure or crack in the lip or tongue which heals with difficulty or recurs on very slight provocation.

The routine examination of every adult male, and female too, should include a very careful inspection of the lips and oral cavity, with the possibility of finding a precancerous lesion being in the examiner's mind. If leukoplakia, fissure, etc., be found it is the physician's duty to explain the situation carefully and see to it that the lesion is removed.

Cancer of the skin usually develops in the plain sight of the patient and occasionally in sight of the doctor also. The vast majority of these skin carcinomas develop in men and a considerable portion of them are preventable. The senile keratoses about the face and hands of advanced middle-aged and elderly people are notoriously precancerous lesions and should be dealt with accordingly. Basal or squamous-cell epitheliomas very frequently develop in these slightly thickened, scaling, pigmented patches of hyperkeratosis, and such precancerous lesions should receive prophylactic radio-therapy whenever found. Moles are probably the most common skin lesions found in the white race. There is hardly a person living who does not have one or several. The vast majority of these moles are harmless but occasionally a mole is so situated that it is subject to frequent irritation, and it then changes its characteristics to become an aggressive metastasizing cancer of the greatest malignancy. For this reason such moles should be routinely sought for and removed before malignant change has occurred.

Sebaceous cysts are not usually considered as potential carcinomas but Caylor found that epitheliomas developed in over 3 per cent of 224 cases. This percentage is high enough to consider the sebaceous cyst as a pre-cancerous lesion and to justify its surgical removal when found. There are many other pre-cancerous skin lesions but those mentioned are the most common.

Malignancy of the intestinal tract and internal organs is rather more difficult to pre-

vent but here again there are certain definite precancerous lesions with which the physician should be familiar. Ulcer of the stomach, and polyps of the colon and rectum, are the most common in the gastrointestinal tract. If a patient is known to have one of these lesions and does not consent to its removal, the alert physician should stress the importance of, and insist upon, annual or periodic check-up in order to detect any carcinomatous change. "Gall stones" is a fashionable disease nowadays, but how many patients or their doctors consider the possibility of carcinoma developing in these gall bladders? Yet well over 75 per cent of cases of carcinoma of the gall

bladder are associated with pre-existing gall stones. It is true that only 4 to 8 per cent of all cases of cholelithiasis develop cancer but it is worth considering when gall stones are known to be present.

There are many other pre-cancerous lesions which should be removed or corrected but time and space do not permit their mention. In closing I would like to stress that it behooves each one of us in the practice of medicine to become informed regarding pre-cancerous lesions and realize that the medical profession can do a great deal in reducing the great cancer mortality in American life.

BLASTOMA OF THE ADRENAL

A Case Report

WILLIAM LE FEVRE, A.B., M.D., F.A.C.P.†
MUSKEGON, MICHIGAN

Malignant tumors appearing in young children are not common and their study often presents interesting problems. I therefore wish to add this case to those previously reported in the literature.

The patient, a four-year-old boy, was first seen during the last of May of this year. At that time he was complaining of pains in the legs, and his parents had noted a difficulty in walking, a toeing out and widening of his gait. The pains in his legs were spasmodic and radiated to the upper extremities and neck. He had been losing weight and apparently at this time was developing a secondary anemia. He was placed on a tonic for further observation and on June 10 was admitted to Mercy Hospital for study. His father and mother are both healthy and he had one younger brother in good health. His birth was normal, and his birth weight was 10 pounds 3 ounces. He had had measles and chicken pox but otherwise had not been sick since birth. On admission he had a temperature of 100, pulse 130 and respirations 28. His normal weight before illness was 35 pounds but he had lost sufficient weight to appear emaciated. His pupils reacted normally to light and accommodation and were equal. The lids were normal in appearance and activity. The tonsils were not enlarged and normal in appearance. Dentition was normal without evidence of infection. The lung expansion was equal, and there were no râles or areas of abnormal dullness. The loss of weight made the costal cartilages a little prominent but there was no tenderness over these points. The cardiac dullness extended from the sternal line to one centimeter to the right of the left nipple line in the fourth space. There were no murmurs and the beat was regular. The abdomen was distended as by gas but there were no palpable tumors. The liver was not enlarged and spleen was not palpable. The legs aside from their thinness were not abnormal in their appearance. The reflexes

were active. There was no Babinski or ankle clonus. The joints appeared large probably from the loss of weight but were not tender on palpation and there was no redness. To summarize, the patient complained of pains in the legs, and showed distension of the abdomen, with loss of weight and a temperature.

The urine showed no albumen or sugar, was alkaline and cloudy. There were no casts, pus, or blood. The red count was 3,620,000 and the white count 18,400 with 65 per cent hemoglobin, 64 per cent polymorphonuclears, and 28 per cent small lymphocytes. An x-ray of the chest showed normal lung and heart shadows.

Considering the fact that the anemia and temperature might be from a blood-borne infection a specimen of the blood was sent to the state laboratory for study. The culture was negative and so was the Widal. But agglutination with both *B. abortus* and *B. melitensis* was positive. This reaction, together with the leg pains, distended abdomen, temperature, and secondary anemia prompted a diagnosis of undulant fever, and treatment was immediately started with undulant fever vaccine according to the method of Dr. Walter Simpson. I started with 0.25 c.c. every third day, gradually increasing to 1 c.c. During his six days in the hospital the temperature varied from 100 to 102. He appeared slightly improved on discharge and was sent home to continue the vaccine therapy.

During June and July he had exacerbations and

†Dr. William M. LeFevre was graduated from the University of Michigan in 1923 and returned to Muskegon to enter private practice with his father, Dr. George L. LeFevre, limiting his practice to internal medicine. He is a member of the medical staffs of Mercy and Hackley Hospitals.

remissions. Near the end of July he began running a higher temperature and developed some vomiting. He was quite restless and developed a cry or whine resembling that seen in meningitis. A few palpable nodules were felt through the abdominal wall which were thought to be mesenteric lymph nodes. The



Blastoma of the Adrenal.

heart dullness had extended outward to the nipple line and at times a click was heard resembling that found in anemia.

A consultant saw him and concurred in the diagnosis of undulant fever, stating that the palpable nodes in the abdomen were frequently found in this condition. He suggested blood transfusions and also luminal for the restlessness which by this time was quite troublesome. He was again admitted to the hospital on July 29 with a red count of 2,390,000 and 45 per cent hemoglobin. The urine was negative except for an occasional granular cast. He was found to be a type one and was given four transfusions by the Scancell method of 120 c.c. each over a period of nine days. A group four donor was used. The red count rose to 2,960,000 and the hemoglobin to 55 per cent. The white count on three tests varied from 11,500 to 14,500. His vaccine was continued as before and after discharge appeared to improve quite rapidly, his temperature remaining below 100 until the last of August. The distension of the abdomen became less, and in general he was somewhat stronger. But during the first half of September he grew worse and at this time a distinct bulging of the eyes, an exophthalmos, appeared. The parents stated that it had slowly been developing during the past few weeks. He was sent to the hospital for three more transfusions. The blood count on discharge was 3,530,000 and 7,900 whites. A barium enema was done which showed a normally filled colon slightly distended. About two weeks later, the abdomen was examined and found large but softer and on palpation a tumor mass was found in the right side which was irregular in outline, about the size of a grapefruit, not notched like a kidney and apparently separate from the liver. The mother stated that it had become

noticeable a few days before as the abdomen softened up. Also a lymph node had appeared in the right groin about the size of a walnut. On October 16 after a transfusion of 150 c.c. of blood, this gland was removed and sectioned. X-rays of the chest at this time showed an enlarged heart but negative lung shadows. There were small decalcified, punched out areas in the head of the right humerus, and also large decalcified areas resembling bone destruction in the occipital bone and spicule formation near the vertex of the skull. The report on the biopsy was a metastatic malignant neoplasm composed of small undifferentiated spherical and polyhedral cells. Our conclusions therefore were sarcoma originating from embryonic tissue possibly teritoma of the right kidney, with metastasis to the skull and right humerus.

From this time on he rapidly grew worse. The exophthalmos remained but not constantly, subsiding at times to near normal in the right eye. The left eye gradually developed an edema of the lid with protusion of the ball. The abdomen became larger and harder. His appetite continued good. Bowel action was obtained only with enemata. The veins of the abdominal wall became large and dilated, a collateral circulation. The head grew larger, causing a separation of the sagittal suture line, and large prominent fontanelles. Edema of the legs developed and later involved the lower side of the body as he lay on his bed. Luminol was given in gradually increasing doses which later gave no relief and was discarded for codein which was used frequently in half grain doses. He was able to sit up on his mother's lap until the last, and at 12:40 on December 5 took some milk while sitting up. He died twenty minutes later.

Autopsy Report.—The body was that of an emaciated male, aged four. Rigor mortis was not present. Superficial veins of the chest and abdomen were markedly dilated. The head was enlarged and the anterior fontanelle was open and measured three centimeters. The suture lines were separated. The frontal and parietal bones were honey-combed and soft.

Chest.—The left pleural cavity contained about 1,000 c.c. of a brownish fluid. The lung was collapsed. The right lung was macroscopically negative. The heart was normal in size and was not removed.

Abdomen.—The intestines were distended. They were partly adherent posteriorly to a large retro-peritoneal mass which filled the entire posterior part of the cavity and involved both kidneys. The appendix was long and extended over the front part of the mass to which it was adherent. The left kidney was involved in the mass but contained no neoplasm. The growth extended through the diaphragm and filled the posterior mediastinum. The anterior bodies of the lumbar vertebra, the ribs, and the left innominate bone showed evidence of invasion by the neoplasm.

Head.—The ventricles were widely dilated and filled with a semipurulent fluid. The meninges were congested and covered with a cobweb appearing membrane showing small hemorrhagic areas. The brain was soft but showed no neoplasm. Just back of the left orbit there was a soft very bloody mass 4 cms. in diameter. This was entirely degenerated and collapsed when removal was attempted. The frontal and parietal bones were honey-combed by metastasis from the neoplasm.

Microscopic Report.—A diffusely spreading and metastasizing malignant neoplasm having the general structure of a small round cell alveolar sarcoma. In the portion of the neoplasm invading the kidney an added feature appears in the form of small

tubular structures lined by a tall columnar epithelium. All the features of this tumor including the age of the patient combine to place it in the group of teratomas having origin from the sympathetic nervous tissue. A sympathico-blastoma almost certainly having origin in the right adrenal.

The symptoms of which this patient complained, pains in the legs, distention of the abdomen, secondary anemia, and a continued temperature, together with the positive agglutination test made that of undulant fever the only logical diagnosis at the time. However, as we look back it is obvious that the cause of these symptoms was the adrenal tumor. The positive agglutination test can be explained on an assumption that at some time earlier in his life he had been infected by the germ of undulant fever, probably producing no symptoms severe enough to attract attention.

Blastomas of the adrenal are very rare. A few cases have been reported in the literature and are referred to as neuroblastomas, sympathoblastomas, and sympathetic neuroblastomas. They are often called sarcomas but bear about the same relation to sarcoma as a glioma does to a carcinoma. They should be separated from the tumors of the cortical tissue which belong to the adenoma group. The tissue of origin of the cortex is the interrenal tissue, primarily from the same tissue which gives rise to the urinary tract, and the malignant types are known as hypernephromas.

Medullary tissue and sympathetic nerve tissue, all originate from the same embryonic tissue, known as sympathicogenous cells. And the tumors originating from the medulla are of various types, the more undifferentiated types being found more during fetal life and early infancy, and are of the small round cell type.

The more differentiated tumors of large round or spindle cells are referred to as ganglionic tumors or paragangliomas and are seen in older people about the age of forty-five.

These malignant, congenital small round

cell types found in children have been known for a long time. Virchow, in 1864, called them gangliomata. Marchand in 1891 described tumors from the sympathetic portion of the adrenal and noted their resemblance to round cell sarcoma. Pepper, in 1901, and Hutchison, in 1907, published series of cases calling them suprarenal sarcoma, and each described a clinical syndrome. Wright in 1910 collected eight cases from the literature and added four of his own and gave them the name neurocytoma or neuroblastoma. Wolbach preferred the name neuroblastoma sympatheticum to Landau's sympathetico-blastoma. The tumor is now described as a malignant neoplasm originating from embryonal pluripotential cells of the sympathetic nervous system. The majority originate from the adrenal medulla but many have been found coming from chromaffin tissue anywhere in the body.

Pepper found that in his cases the metastasis was to the liver and many of the papers written since call such cases the Pepper type. Hutchison's cases metastasized to the skull and as a result of his paper we have the second type of syndrome. Many of the cases reported show metastasis to the orbits, and it was thought that tumors of the left adrenal would affect the left orbit and vice versa. My case had metastasis to the left orbit but the primary was in the right adrenal. One case is reported in which the tumor was found at birth. The doctor was unable to complete a breach delivery because of the size of the fetal abdomen. He did an evisceration and found the adrenal tumor. Other cases are reported up to four years of age. Metastasis to the bones, lymph glands, skull, liver, ribs, vertebra, and to the kidneys, are frequent. Either or both adrenals may be affected. The brain tissue was not involved in any case I read, but either or both orbits were involved in nearly all cases where metastasis took place in the head.

NON-MYXEDEMATOUS HYPOTHYROIDISM*

HELENE EMETH SCHUTZ, M.D.†
ANN ARBOR, MICHIGAN

Increasing attention is being paid to mild cases of hypothyroidism, as a review of the recent literature reveals. Engelbach² called this condition non-myxedematous hypothyroidism and defined it as "hypometabolism in which no non-endocrine or endocrine etiology other than the thyroid is presented."

According to Warfield,⁴ Koch called attention to the possibility of minor decreases in thyroid secretion in 1904. He felt that such cases would not present a true myxedema, but was unable to do anything but speculate upon their occurrence. As laboratory measurements of metabolism have been developed and commonly used, the condition anticipated by Koch has been found to be comparatively common. Vis³ even goes so far as to say that hypothyroidism is "probably the most common of all chronic diseases in Michigan." Reports such as that of Youmans and Riven⁷ from Nashville, Tennessee, show that many cases of mild hypothyroidism may be found in non-goitrous regions.

All writers agree upon the multiplicity of symptoms. Easy fatigability and a lack of energy are outstanding. In Watkins'⁵ series of fifty patients, 82 per cent complained of loss of energy and initiative. This is an outstanding complaint in the patient's recital; one is often tempted to make the diagnosis of neurasthenia when the general physical examination is completely negative. Constipation is a common difficulty; in Watkins' series 44 per cent listed it. It would seem to be due to lack of tone in the intestinal tract. Generalized headaches are another frequent symptom. The patient's description makes this condition sound very much like a true migraine.

There are no constant physical findings. The weight may be above or below the average or it may be normal for the patient's build. The pulse rate may be slow, normal, or slightly above normal. There may or may not be dryness of the skin. Weiss and King⁶ found swelling of the eyelids common and state that it may be the only obvious abnormality found in a routine examination. Before completing the examination it is very important to rule out occult pulmonary tuberculosis by x-rays of the chest.

The diagnosis must rest upon the finding of a lowered metabolic rate. According to Engelbach,² the normal range is from minus ten to plus ten. So any rate below minus ten must be looked upon with suspicion. Hypercholesterolemia is a common finding. We may look forward to an eventual simplification of the iodine tolerance test which has recently been reported by Elmer¹ from the University of Lwów, Poland. It is based upon the fact that in hypothyroidism the tissues do not fix the iodine of the blood as they do in euthyroidism or hyperthyroidism. Iodine is injected intravenously and the percentage of iodine eliminated in the urine within six hours is measured. In hypothyroidism the percentage excreted runs from 23 to 40 per cent; in euthyroidism it is from 12 to 20 per cent; while in hyperthyroidism it may be either below 12 per cent or as high as 20 per cent. At the present time it is a time-consuming determination and not suitable for routine clinical use.

In the female, disorders of menstruation are common. They range from amenorrhea to menorrhagia. Increasingly we are inclined to believe that any disorder of menstruation unaccompanied by pelvic pathologic lesions calls for determinations of the basal metabolic rate. In this connection Case 1 is pertinent.

Case 1.—The patient was a small, well nourished, young Jewish girl. Upon her first examination in September, 1931, at the age of seventeen, she was 61.1 inches tall, weighed 109 pounds, skin was slightly dry, thyroid was normal, pulse 80, blood pressure 110/82. The general physical examination was normal. X-rays of the chest were negative. She reported in January of 1932 complaining of amenorrhea since September, of feeling tired and sluggish for the past month, and of having gained 16 pounds since September. Rectal examination showed an infantile uterus, but was otherwise negative. Blood count and urine examinations were negative. Basal metabolic rate done at that time was minus thirteen.

*From the Student Health Service, University of Michigan.

†Dr. Schutz is a graduate of the University of California Medical School, 1927. She is on the staff of the University of Michigan Health Service and an Instructor in Hygiene and Public Health at the University.

She was started on small doses of thyroid. In October of 1932 a metabolic rate was minus 25 per cent. Thyroid dosage was increased to three grains daily and basal metabolic rate was then found to be minus three. Various other glandular preparations, including anterior pituitary substance, were given. The patient began to menstruate in May of 1933 and has been fairly regular since that time. She has taken thyroid faithfully, persisting in it because she feels so much better while taking it. At the present time the metabolic rate is kept around zero by two grains daily alternating with three grains daily. Here it is intriguing to speculate as to what, if any, medication restored normal menstrual function. The improvement in energy and well-being on thyroid certainly justified its administration from the clinical standpoint.

Case 2.—This patient showed a similar amenorrhea and lack of energy, but this time in a rather thin person. In September, 1934, she was twenty-two years of age, 64 inches tall, weighed 110 pounds. Pertinent physical findings included a slight growth of hair on the breasts, a dry skin, a pulse of 80, blood pressure 104/64; the thyroid was normal. The uterus was small, otherwise the pelvic examination was negative. X-rays of the chest and skull were negative. She had not menstruated since May of 1934. Basal metabolic rate was minus seventeen. She tolerated three grains of thyroid, which kept the metabolic rate at minus one or two per cent. She began to menstruate in December, 1934, and has been regular since that time. The patient described herself as feeling much "lighter" mentally when taking thyroid. She gained to 120 pounds while on thyroid medication.

Case 3.—This patient was an asthenic young girl, twenty years old, weighing 117 pounds, and 65 inches tall. She had frequent generalized severe headaches, great fatigability, regular menstruation with a profuse flow on the first day. Except for the underweight the general examination was negative, as was the pelvic examination. The pulse rate was usually in the nineties. Repeated x-rays of the chest were negative. X-rays of the skull were negative. The basal metabolic rate was minus twenty-seven. This was brought up to a plus six by two grains

of thyroid daily. The patient has much more energy and the headaches have practically ceased.

These cases all illustrate the frequency of fatigability as a symptom of mild hypothyroidism. It is certainly the outstanding complaint and emphasizes the necessity for determining the metabolic rate when fatigue is the presenting difficulty. In our cases there were no consistently helpful physical findings. The pulse rate may be slow, normal, or slightly above normal. Likewise the individual may be thin, fat, or of normal weight. In all these cases, after careful examinations including x-rays have ruled out tuberculosis, a determination of the metabolic rate is indicated. Then thyroid medication, when the metabolic rate is lowered, gives exceedingly satisfactory results. Of course it is often necessary to have repeated metabolic rates before the diagnosis can be established. But the frequency of the condition, especially in young women, completely justifies this procedure.

Bibliography

1. Elmer, A. W.: Iodine tolerance test for thyroid insufficiency. *Endocrinology*, 18:487-496, (July-August) 1934.
2. Engelbach, William: *Endocrine Medicine*. Charles C. Thomas, Springfield, Illinois, 1932.
3. Vis, W. R.: Diagnosis of mild hypothyroidism. *Jour. Mich. State Med. Society*, 30:829-830, 1931.
4. Warfield, L. M.: Hypothyroidism. *Jour. Am. Med. Assoc.*, 95:1080-1082, 1930.
5. Watkins, R. H.: Mild hypothyroidism. *Ann. Int. Med.*, 7:1534-1539, (June) 1934.
6. Weiss, H. B., and King, Clarence: Swelling of the eyelids in patients with hypothyroidism. *Ohio State Med. Jour.*, 28:341-343, (May) 1932.
7. Youmans, J. B., and Riven, S. S.: Hypothyroidism without myxedema. *Ann. Int. Med.*, 5:1497-1505, 1932.

Back Strain and Sciatica

Frank R. Ober, Boston, points out that when roentgenograms of the sacro-iliac and lumbosacral joints are presented which show no evidence in this region of any pathologic condition, either congenital or acquired, it would seem difficult to make a positive diagnosis of either sacro-iliac or lumbosacral strain. One is frequently troubled by the fact that there is a negative roentgenogram of a patient whose clinical signs and symptoms are those of extreme irritation in the sacro-iliac or lumbosacral joints. As a result of observation and examination of a number of cases of this type, it has been discovered that the iliotibial band is an exceedingly important factor in the occurrence of lame backs, with or without an associated sciatica. It has been observed in many patients with low back disturbances that the iliotibial band is extremely tight and prominent when the patient is lying on his back, with the knees together, or when he is in the erect position. The band is very rigid, almost bonelike in consistency, when under tension, usually about one-half inch wide, and is raised above the level of the fascia lata, with which it connects anteriorly and posteriorly. Patients who have this contracture complain of the

low back pain as a sensation of strain in the lower part of the back in the region of the lumbar and sacral bones or in the sacro-iliac articulations. Severe sciatica is associated quite often with the condition and there also may be pain along the lateral femoral cutaneous nerve and occasionally along the distribution of the femoral nerve. Those who have the double contracture may show sciatic irritation on one side or both sides, or alternating attacks. The author concludes that the contracted fascia lata is a common cause of lame backs and has been unrecognized. If this is so, it would seem, in the presence of normal roentgen studies, that fusion of the sacro-iliac or lumbosacral regions should not be done. When the fascia lata is contracted, it must produce bad posture. Therefore, apparatus designed to hold the abdomen or the back, or exercises given to straighten the back, will be ineffectual against such severe contractures. The treatment of this condition is the relief of the contracture. In those cases in which there is no sciatica or other pain, the low back pain may be relieved by stretching exercises, and in those cases in which there is a severe sciatica, operation is indicated and the method of procedure is given.—*Jour. A. M. A.*

CANCER SURVEY OF MICHIGAN*

Made by
FRANK LESLIE RECTOR, M.D.†

That cancer patients are being admitted to hospitals in late stages of the disease in the majority of cases is emphasized by the high mortality among these patients compared to deaths from all admissions. In the hospitals reporting in this survey, 19.9 per cent of cancer patients died in the hospital while deaths from all admissions were but 5.8 per cent. It is also interesting to note that but 17 per cent of cancer deaths in Michigan in 1933 took place in hospitals.

Table XX gives detailed information on admissions, deaths and autopsies reported by the hospitals of Michigan in this survey. This table indicates that, on the basis of three living cases for each death, not more than 28.6 per cent of cancer patients in Michigan in 1933 received hospital care. Of course, cancer patients are seen in smaller hospitals not included in this survey, but their number is so few that the total number of hospital cases recorded herein would not be affected materially. It would be interesting to know definitely how and where the remaining 71 per cent of these fatal cases were treated. Some are known to drift into the hands of quacks and charlatans who promise, but fail to accomplish, definite cures; others doubtless delay seeking treatment or refuse it until they are hopelessly incurable and die without medical attention. Another group of ambulatory patients is treated in physicians' offices. The determination of methods of treatment or lack of treatment of this group as a whole would prove a worth-while study for the medical profession in Michigan.

Cancer Treatment Facilities in Michigan

Hospitals—At the time this survey was made, fifty of the seventy hospitals listed were fully approved and eight provisionally approved by the American College of Surgeons, and twenty-five were approved for interne training by the American Medical Association.

No hospital in Michigan is devoted exclusively to the treatment of cancer and allied diseases. The Dr. W. J. Seymour

Hospital, Eloise, has set aside 200 beds, 100 for each sex, for cancer patients. These are the only beds in Michigan hospitals so designated. All general hospitals of the State accept cancer patients. Many of the smaller institutions see but few such patients, and the only facilities available for cancer therapy in many of them are surgical in character.

These seventy hospitals are located in thirty counties. There were forty-four counties in Michigan without hospitals of twenty-five beds or more at the time this survey was made. Approximately 12 per cent of the population lives in these forty-four counties, 15 per cent of the cancer deaths in 1933 were reported from them, and 10 per cent of the physicians of the State reside in them.

From the distribution of hospitals noted above and from the information in Table XXI, relative to facilities for diagnosis and treatment of malignant disease, it is seen that the development of special tumor services should be confined to those centers in the State where facilities and experienced personnel are found, or where they may be developed.

X-ray Equipment—Eighteen hospitals in Michigan are equipped with x-ray apparatus of 200,000 volts or more, the minimum voltage considered essential by the American College of Surgeons for acceptable cancer therapy, and also recommended by those having the most experience in the use of deep therapy for treatment of malignant disease. In some communities having no deep therapy in the hospital, it is available in the office of local physicians. In other hospitals without deep therapy, patients needing such treatment are referred to institutions where such facilities are available, or to physicians with equipment and training in this form of therapy.

In Harper Hospital, Detroit, there is x-ray equipment of 650,000 volts capacity. This is one of eight super-voltage installations in the United States, the others being in New York (2), Chicago, Lincoln (Nebraska), Seattle, Los Angeles and Pasadena.

*Continued from January, 1936, issue.

†Field Representative, American Society for the Control of Cancer, New York, N. Y., Clarence Cook Little, Sc.D., Managing Director.

TABLE XXI. CANCER TREATMENT FACILITIES IN CERTAIN MICHIGAN HOSPITALS
1935

Hospital	City	Bed Capacity	Deep Therapy in Kv.	Mg. Radium Owned by Hospital	Mg. Radium Owned by Physician	Laboratory		Pathologist		Out-Patient Department	Teaching Affiliation	Social Service Department	Organized Tumor Service
						Perma-nent Tissue Sections	Frozen Sections	Physician	Full or Part Time				
Emma L. Bixby	Adrian	33	No	No	No	No	No	No	..	No	No	No	No
*James W. Sheldon	Albion	50	No	No	No	No	No	(1)	..	No	No	No	No
X *St. Joseph's Mercy	Ann Arbor	115	200	No	50	Yes	Yes	Yes	Full	Yes	No	No	No
X *University	Ann Arbor	1,285	200	360	..	No	No	(2)	Full	No	Yes	Yes	Yes
Hubbard Memorial	Bad Axe	28	No	..	No	No	No	..	..	No	No	No	No
X *Battle Creek Sanitarium	Battle Creek	1,000	250	425	No	Yes	Yes	Yes	Full	No	No	Yes	No
*Leila Y. Post Montgomery	Battle Creek	175	250	No	No	Yes	Yes	Yes	Full	No	No	No	No
*Nichols Memorial	Battle Creek	71	No	No	No	Yes	Yes	(3)	Part	No	No	No	No
Bay City General	Bay City	25	No	No	152	No	No	(3)	..	No	No	No	No
Bay City Samaritan	Bay City	45	No	52	100	Yes	Yes	Yes	Full	No	No	Yes	No
X *Mercy	Bay City	145	200	No	152	No	No	(3)	..	No	No	No	No
*Charles Godwin Jennings	Cadillac	50	No	No	No	No	No	(4)	..	No	No	No	No
**Delray	Detroit	66	No	No	..	No	No	(4)	..	No	No	No	No
*East Side General	Detroit	95	No	No	..	No	No	(5)	..	No	No	No	No
X *Evangelical Deaconess	Detroit	65	No	No	..	No	No	(6)	..	No	No	No	No
X *Grace	Detroit	115	No	No	..	No	No	(4)	..	No	No	Yes (8)	No
*Grosse Pointe Cottage	Detroit	473	220	No	215	Yes	Yes	Yes	Full	Yes	No	Yes	Yes
X *Grosse Pointe	Detroit	45	No	No	..	No	No	(4)	..	No	No	No	No
X *Harper	Detroit	35	No	No	..	No	No	(9)	..	No	No	No	No
X *Henry Ford	Detroit	650	650	450	400	Yes	Yes	Yes	Full	Yes	No	Yes	Yes
X *Jefferson Cl. and Diag.	Detroit	560	200	220	..	Yes	Yes	Yes	Part	No	No	Yes	Yes
X *Providence	Detroit	299	No	50	..	Yes	Yes	Yes	Part	No	No	No	No
X *Receiving	Detroit	650	No	100	50	Yes	Yes	Yes	Part	No	Yes	Yes	No
X *St. Joseph's Mercy	Detroit	175	No	No (10)	..	Yes	Yes	Yes	Part	Yes	Yes	Yes	Yes
X *St. Mary's	Detroit	257	No	No	50	Yes	Yes	Yes	Part	Yes	Yes	Yes	Yes
X *Woman's	Detroit	220	250	240	..	Yes	Yes	Yes	Full	Yes	No	Yes	Yes
Lee Memorial	Dowagiac	32	No	No	No	No	No	(1)	..	Yes	No	No	Yes
X *Dr. W. J. Seymour	Eloise	700	200	335	No	Yes	Yes	Yes	Full	Yes	Yes	No	Yes
St. Francis	Escanaba	100	No	No	No	No	No	(2)	..	No	No	No	No
X *Hurley	Flint	375	220	No	50	Yes	Yes	(11)	..	No	No	No	No
*Women's	Flint	40	No	No	50	No	No	(2)	..	No	No	No	No
*Goodrich General	Goodrich	24	No	No	105	Yes	Yes	Yes	Full	Yes	No	Yes	No
X *Blodgett	Grand Rapids	132	200	210	..	Yes	Yes	Yes	Full	Yes	No	Yes	No

CANCER SURVEY OF MICHIGAN—RECTOR

X *Butterworth	Grand Rapids	224	200	110	105	Yes	Yes	Yes	Full	Yes	No	No
X City General	Grand Rapids	35	No	No	105	No	No	No	No	No	No	No
X *St. Mary's	Grand Rapids	218	200	No	105	Yes	Yes	Yes	Part	Yes	Yes	No
**St. Francis	Hamtramck	48	No (13)	No	(13)	Yes	No	Yes	Part	No	No	No
*St. Joseph	Hancock	65	No	No	No	No	No	(2)	..	No	No	No
X *Highland Park General	Highland Park	156	250	No	..	Yes	No	(4)	..	Yes	No	No
**Holland City	Holland	50	No	No	No	No	No	(14)	..	No	No	No
*Grand View	Ironwood	60	No	No	No	No	No	(15)	..	No	No	No
*Ishpeming	Ishpeming	44	No	No	No	No	No	(16)	..	Yes	No	No
X *W. A. Foote Memorial	Jackson	150	No	No	No data	No	No	(2)	..	Yes	No	No
*Mercy	Jackson	145	No	No	No data	No	No	(2)	..	No	No	No
*Borgess	Kalamazoo	214	No (7)	No	No	Yes	Yes	Yes	Part	No	No	No
*Bronson	Kalamazoo	115	No (7)	No	No	Yes	Yes	Yes	Part	No	No	No
X *Edw. L. Sparrow	Lansing	145	No	No	150	No	No	No	Part	No	No	No
X *St. Lawrence	Lansing	128	No	No	150	No	No	(2)	..	No	No	No
**Mercy	Manistee	56	No	No	No	No	No	(14)	..	No	No	No
*St. Luke's	Marquette	85	No	No	No	No	No	(2)	..	Yes	No	No
St. Mary's	Marquette	65	No	No	No	No	No	(2)	..	No	No	No
St. Joseph's	Menominee	50	No	No	No	No	No	(17)	No	No	No	No
**Mercy	Monroe	58	No	No	No	No	No	(6)	..	No	No	No
*St. Joseph's	Mt. Clemens	100	No	No	No	No	No	(5)	..	No	No	No
X *Hackley	Muskegon	108	250	100	10	Yes	Yes	Yes	Full	No	No	No
X *Mercy	Muskegon	100	No	No	10	No	No	(2)	..	No	No	No
**Pawating	Niles	35	No	No	No	No	No	(18)	..	No	No	No
Lockwood	Petoskey	32	No	No	No	No	No	(14)	..	No	No	No
Petoskey	Petoskey	40	No	No	No	No	No	(14)	..	No	No	No
*St. Joseph's Mercy	Pontiac	175	No	No	No	Yes	Yes	Yes	Full	Yes	No	No
X *Saginaw General	Saginaw	133	No (19)	No	No	No	No	(20)	..	Yes	No	No
*St. Luke's	Saginaw	50	No (19)	No	201	No	No	(20)	..	No	No	No
X *St. Mary's	Saginaw	156	200	No	201	No	No	(20)	..	No	No	No
*Clinton Memorial	St. Johns	50	No	No	No	No	No	(2)	..	No	No	No
*Chippewa Co. War Mem.	S. Ste. Marie	68	No	No	No	No	No	(2)	..	No	No	No
**Sturgis Memorial	Sturgis	38	No	No	No	No	No	(2)	..	No	No	No
**Three Rivers	Three Rivers	30	No	No	No	No	No	(14)	..	No	No	No
James Decker Munson	Traverse City	55	No	No	No	No	No	(2)	..	No	No	No
*Wyandotte General	Wyandotte	150	No (13)	No	(13)	Yes	Yes	Yes	Part	Yes	No	No

X Approved by the American Medical Association for interne training.

*Approved by American College of Surgeons.

**Provisionally approved by the American College of Surgeons.

Radium—The following hospitals reported ownership of radium in the amounts indicated:

	Milligrams
University, Ann Arbor.....	360
Battle Creek Sanitarium, Battle Creek.....	425
Bay City Samaritan, Bay City.....	52
Harper, Detroit	450
Henry Ford, Detroit.....	220
Jefferson Clinic and Hospital, Detroit.....	50
Providence Hospital, Detroit.....	100
Woman's, Detroit	240
Dr. W. J. Seymour, Eloise.....	355
Blodgett, Grand Rapids.....	210
Butterworth, Grand Rapids.....	110
Hackley, Muskegon	100
Total.....	2,672

In the following cities the indicated amount of radium is owned privately in addition to that owned by hospitals:

	Milligrams
Ann Arbor	50
Bay City	100
Detroit	765
Flint	50
Grand Rapids	105
Lansing	150
Muskegon	10
Saginaw	201
Total.....	1,431

This gives a known total of 4,103 milligrams of medical radium in the State. There may be other small quantities owned by private physicians, but it is believed they are not large.

It has been estimated by cancer authorities that two grams of radium should be available for each million of the population or for each thousand deaths from the disease. On this basis there should be available an additional 6,000 milligrams or more of radium in Michigan.

Laboratory Facilities.—Twenty-six hospitals reporting in this survey have either full or part-time physician pathologists with equipment for preparing permanent tissue sections. One hospital is served by a non-medical pathologist. Twenty-four of these hospitals also maintain frozen section equipment. Thirty-seven other hospitals routinely send all of their tissues to capable pathologists in Michigan. This leaves but seven hospitals reporting in this survey not submitting all tissues for pathological examination, and three of these report that selected tissues are examined at the request of the physician in charge.

Autopsies.—A wide variation was noted in the number of autopsies performed in hospitals reporting in this survey. Refer-

ring to Table XX, it is seen that eleven hospitals reported no autopsies during 1933. The bed capacity of these eleven hospitals was 558, and to them 8,157 patients, of whom 101 were cancer patients, were admitted during 1933. There were 438 deaths among these patients, not one of which came to autopsy. Twenty-four other hospitals had a smaller percentage of autopsies than required by the American Medical Association, 15 per cent, for interne training. The bed capacity of these twenty-four hospitals was 1,778, and among the 27,052 patients, of whom 488 were cancer patients, there were 1,349 deaths, only 112 of whom were autopsied. Combining the two groups of hospitals noted above, in 1933 there were in Michigan thirty-five hospitals of 2,336 bed capacity that admitted 36,209 patients, of whom 589 were cancer patients, and in which occurred 1,787 deaths with but 112 autopsies, an autopsy percentage of 6.3. But fifteen of the 589 cancer deaths in these hospitals were autopsied, a percentage of 2.5.

The highest percentage of autopsies was reported by Grand View Hospital, Ironwood, 63.6 per cent, followed in order by University Hospital, Ann Arbor, with 54 per cent, Henry Ford Hospital, Detroit, with 45 per cent, and the Edw. L. Sparrow and St. Lawrence Hospitals, Lansing, with 42 and 41 per cent, respectively.

Five hospitals reported 100 per cent autopsies on cancer deaths, but these deaths were usually few in number, in no instance being more than five. In general, the percentage of cancer autopsies was higher than all autopsies. The percentage of autopsies in the twenty-five hospitals approved by the American Medical Association for interne training was thirty-one for all deaths and forty-eight for cancer deaths. Of the twenty approved internship hospitals in the United States with the highest percentage of necropsies in 1933,* none is located in Michigan.

The comparison between the favorable situation regarding examination of surgical tissues and the small percentage of autopsies in many of the largest hospitals of the State having the services of capable pathologists is one of interest and should be of some concern to those institutions offering interne training. Recognizing the autopsy as one of the most valuable methods of interne

*Journal American Medical Association, v. 103, No. 8, p. 580, August 25, 1934.

teaching and realizing that there are in practically all hospitals of the State approved for interne training pathologists capable of making and interpreting autopsies, it would seem desirable that a greater effort be made by these hospitals to obtain a much higher percentage of autopsies than has been reported in this survey.

The usual excuse given for a low necropsy record is the inability to obtain permission of relatives. Such excuses can hardly be considered valid when many other hospitals in widely separated localities report no difficulty in obtaining a high percentage of autopsies.

Out-Patient Service.—Twenty-one hospitals reporting in this survey have organized out-patient departments. These are located in Ann Arbor, Detroit, Dowagiac, Eloise, Grand Rapids, Ishpeming, Jackson, Marquette, Pontiac, Saginaw and Wyandotte. Several other hospitals provide facilities for the return of ambulatory patients for observation or re-treatment, but do not maintain organized dispensaries for general out-patient work. In other communities visited, the medical profession undertakes the care of indigent patients in their offices.

Organized Tumor Service.—Tumor clinics organized in whole or in part in keeping with recommendations of the American College of Surgeons were found actively functioning in the following hospitals:

University, Ann Arbor
Grace, Detroit
Harper, Detroit
Henry Ford, Detroit
Receiving, Detroit
St. Mary's, Detroit
Woman's, Detroit
Dr. W. J. Seymour, Eloise

The organization of similar clinics in other hospitals was being discussed and in a few instances such service was found to have functioned previously, but at the time of the survey was inactive.

Social Service.—Nineteen hospitals co-operating in this survey maintain departments in charge of trained social workers. In smaller communities and in smaller hospitals it was said that physicians were able to keep in touch with their cancer patients by frequent contact with them or with their friends or relatives.

Teaching Affiliations.—Three hospitals are directly affiliated with medical schools for teaching purposes. These hospitals and their affiliated schools are:

University, Ann Arbor, University of Michigan School of Medicine
Receiving, Detroit, Wayne University School of Medicine

Dr. W. J. Seymour, Eloise, Wayne University School of Medicine

State Department of Health.—Until January, 1935, the State Department of Health had not participated actively in any of the cancer programs of the state beyond contributing information on cancer deaths. In January of this year an appropriation from the U. S. Public Health Service was made for the purpose of studying cancer incidence in rural communities. Since that time a physician has been employed by the department on a full-time basis and is devoting his time to studying this problem in those counties and districts of the State having full-time health departments. It is hoped and believed that the information gained by this detailed study will prove of great value in extending knowledge of this problem in rural areas and of methods best suited to its control.

Detroit Department of Health.—In 1927 a Division of Cancer Control of the Bureau of Medical Service of the Detroit Department of Health was organized under the direction of a part-time physician and three full-time nurses. The work of this division centered around the collection of statistics on cancer patients available through hospitals and private practitioners, and on cancer mortality from records of the Health Department. The services of this division were made available without cost to hospitals and physicians of Detroit for obtaining follow-up information on cancer patients. At the same time data of importance were obtained for the records of the division with the hope that in time a collection of data on various aspects of the cancer problem would be available for research purposes.

The work of this division continued until more than 3,000 records had accumulated in its files. Due to the depression it became necessary to reduce the personnel of this division, thereby curtailing its activities to a great extent. Two nurses remained in charge and devoted their time largely to following cases already listed. About two years ago a coöperative program was developed by the Detroit Department of Health and the Wayne County Medical Society whereby the Medical Society made available without cost quarters for housing

the files of the division and its personnel, which at this time consists of a full-time nurse. Her efforts are directed toward obtaining for the files of the division data on hospitalized cancer patients and in following, so far as her resources permit, cases that have been under treatment.

It is hoped that the time will soon come when the work of this division will not only return to the functions it exercised when first organized, but expand to provide a clearing house on all cancer patients in the city of Detroit. Its work has been unique in that Detroit has the only municipal health department in the United States undertaking a definite cancer program. A large amount of valuable data is to be found in the files of this division, and if the follow-up can be maintained, this information will become of unique and lasting value as a source of material for clinical and statistical study.

State Medical Society.—The invitation to the American Society for the Control of Cancer for this survey is in keeping with the interest of the Michigan State Medical Society in the cancer problem. Since 1930 there has been an active cancer committee which has concerned itself with the study of the distribution of facilities for the diagnosis and treatment of cancer, and more recently with educational problems. At the present time it has under way a comprehensive lay educational program in which authoritative articles on various phases of cancer are appearing in the newspapers of the State. A series of educational talks on cancer to high schools and colleges of the State is also being developed.

In coöperation with the postgraduate department of the University of Michigan, a series of short courses for physicians of Michigan has been developed in which the subject of cancer has had a prominent place. Through the State Joint Committee on Public Health Education, the State Medical Society has coöperated with the following organizations in the preparation of news articles on health and medical problems and in answering inquiries on similar subjects from individuals through the State:

Michigan Department of Health
Wayne University College of Medicine
Michigan State Dental Society
Michigan Tuberculosis Association
Michigan State Nurses' Association
Michigan State Conference of Social Work
Wayne County Medical Society Committee on Education

State Department of Public Instruction
Michigan Division of the American Red Cross
Michigan State College
Michigan State Hospital Association

Private Health Agencies.—As noted in the preceding section, private health agencies in Michigan have long been active in health educational work.

The Kellogg Foundation, Battle Creek, is concerned primarily with public health education and health work with children under age sixteen. It has not yet taken official notice of cancer as a health educational problem among younger age groups, but when the program of the cancer committee of the State Medical Society for education of high school and college groups is further developed, it would seem logical and desirable that this Foundation assist in the undertaking.

The American Society for the Control of Cancer several years ago was represented by a state chairman who was active in lay educational campaigns. With the changed policy of the Society regarding the emphasis on lay education, the chairmanship for Michigan lapsed for a period, but there is now an active state chairman who is co-operating fully with the cancer committee of the State Medical Society and of the Wayne County Medical Society in the programs of these two committees.

Cancer Prevention and Control

In the foregoing pages details of cancer facilities and service as found by this survey in Michigan have been set forth. Before discussing a program for prevention and control of cancer in Michigan, it may be well to consider briefly some general problems connected with malignant disease.

General Considerations.—While mortality from heart disease is far greater than from cancer, it is probably true that cancer is the most lethal of all diseases, and untreated kills practically all its victims. It never spontaneously terminates in recovery as do acute and contagious diseases. Unless treated early and adequately, chances of a fatal termination are almost 100 per cent. Authentic reports of spontaneous cessation of malignant growth are so few as to be medical curiosities and, according to Dr. James Ewing,* the number of authentic cures of cancer by means other than sur-

*Causation, Diagnosis, and Treatment of Cancer, p. 85. The Williams and Wilkins Co., Baltimore, 1931.

gery, x-ray, or radium, or a combination of these, is equally rare.

Deaths from cancer are increasing annually. Statisticians may debate whether this increase is relative or actual, but this question is not of so much importance to those interested in prevention and control as is the fact that more people are dying from cancer each year.

Cancer is no respecter of social or economic groups. While it falls with more economically disastrous results on those in the small income class, as does all other incapacitating illness, it is found with equal frequency among the well-to-do.

There is no known specific etiology, although scientific workers in the field believe that chronic or protracted irritation, mechanical, chemical, or thermal, is one of the principal contributing factors. There is no conclusive evidence that heredity plays any important part in causing this disease in humans, neither has environment any influence except in a few instances where occupation has shown a close relationship to cancer. Cancer of the bladder among dye workers, chimney sweeps' cancer, and tar cancer among petroleum workers have all shown a rather close relationship to materials worked with.

It is thus seen that the term "cancer" does not apply to a specific disease entity, but to a large group of pathological conditions with a similar symptomatology and histological appearance occurring in both sexes and in all ages. Undoubtedly there is a diverse etiology for conditions known under this designation.

Studies on the incidence of cancer have shown approximately three living cases per death. As the annual number of cancer deaths closely approximates the number of practicing physicians in the State, there are approximately three living cancer cases annually for each physician. This distribution makes it probable that the average physician will see so few cases during the year that his active interest in this problem is at times difficult to enlist.

The only recognized treatment methods are surgery and irradiation by x-ray and

radium either singly or in combination. So far as known, every form of cancer is best treated by these methods. There is no occasion for a physician to use other forms of therapy because one of these methods may not be available locally. Under such conditions the interests of the patient dictate that he should be sent where these facilities are available.

Treatment of cancer along lines recognized as adequate requires special facilities, equipment and training. At this time there are but twelve special cancer hospitals in the United States, the great majority of patients with the disease being treated in general hospitals. As the profession and public become better educated to what constitutes adequate cancer service, special institutions may be developed for these patients. At this time special tumor services are being organized in some of the larger hospitals throughout the country. It remains to be seen whether general hospitals can and will provide necessary facilities and personnel to care for cancer patients in an acceptable manner, or whether additional institutions specially designed for this purpose will come into existence.

In addition to provision for treatment by one or more of the means mentioned, a well rounded cancer program includes complete records of the service rendered and a follow-up system whereby the patient's history is available over a period of years following treatment. These patients should be followed for a minimum of five years, and, if possible, during the remainder of their lives, if worthwhile evaluation of the treatment is expected. All hospital cancer records should be kept open until the death certificate can be filed with them.

Sufficient authentic evidence is now available to show that when treated during early stages, i.e., while the lesion is confined to its original site and without evident metastasis, permanent cure can be effected in a large percentage of cases. If the disease is first seen late in its course, the chance of cure is greatly reduced.

(To be continued in March issue)

President's Page

ETERNAL VIGILANCE AND LIBERTY

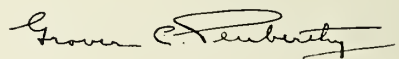
IN SPEAKING of the unemployment insurance provisions of the Social Security Act, *Collier's Weekly* comments editorially to the effect that all states may reasonably be expected to devise and establish insurance or pension systems soon. "The collection of taxes by the federal government will stimulate even the most reluctant legislature to some kind of action. People who pay the taxes will insist upon deriving some benefit from their money." And speaking of the freedom which the Act gives to the individual state, the editorial says: "It is free to indulge its fancy. The opportunity for not-too-scrupulous politicians is large and inviting."

The truth is that the federal law does not establish unemployment insurance but creates a tax-supported Trust Fund from which states having unemployment insurance or pension systems may draw. In other words, the federal law virtually compels the state to enact federal-approved legislation. Should it refuse, it pays taxes into the federal fund but receives no benefits.

In its report to President Roosevelt, on January 15, 1935, the Committee on Economic Security, whose recommendations were the foundation of the Social Security Act, made the following summation in its paragraph on health insurance: "The rôle of the Federal Government is conceived to be principally to provide subsidies, grants, or other financial aids or incentives to states which undertake the development of health insurance assistance which meets the federal standards." The precedent of the unemployment insurance machination will be followed. Despite the fact that the employed of the nation do not want health insurance (the laboring group recognizes that it means less wages and more taxes and, therefore, has voted against it) the federal law will coerce the states to enact federal-approved health insurance legislation.

Every physician in Michigan should be alive to the possibility of having health insurance forced upon him. Those who would socialize medicine, the groups and individuals who would radically change medical practice for some new, untried type, are busy trying to accomplish their work and to execute it soon. Every doctor of medicine should heed this warning, and become familiar with the arguments of the other side, as well as those on his own side.

The brochure on socialization of medicine being prepared by the Michigan State Medical Society will be sent to you shortly. Study it thoroughly. See that copies get into the hands of your patients, publicly-minded, influential citizens, and other key laymen. This is a job for each and every practitioner of medicine. It cannot be done by a few. It is up to all physicians.



THE JOURNAL

OF THE

Michigan State Medical Society

PUBLICATION COMMITTEE

A. S. BRUNK, M.D., Chairman.....Detroit
 HOWARD H. CUMMINGS, M.D.....Ann Arbor
 J. EARL MCINTYRE, M.D.....Lansing

Editor

J. H. DEMPSTER, M.A., M.D.
 5761 Stanton Avenue, Detroit, Michigan

Medical Secretary

C. T. EKELUND, M.D.
 35 W. Huron Street, Pontiac, Michigan

Business Manager

Wm. J. BURNS, LL.B.
 2642 University Avenue, St. Paul, Minnesota
 or
 2020 Olds Tower, Lansing, Michigan

FEBRUARY, 1936

*"Every man owes some of his time to the up-
 building of the profession to which he belongs."*

—THEODORE ROOSEVELT.

EDITORIAL

TEACHERS AND DOCTORS

Education is under state control. State control of medicine is now limited to state mental hospitals, state and civic hospitals for indigents and civic hospitals for infectious diseases.

We have made an effort to ascertain the number of unemployed teachers in the state of Michigan, which, at the present writing, we find to be 1,203. In other words, 1,203 teachers are seeking employment and some who otherwise would be in the unemployed class are employed on SERA and other government projects, which we presume are extemporized jobs or positions simply for the sake of giving employment that would not be necessary in normal times. Under state control of medicine, there would be a certain limited number of positions for physicians. If there were more doctors in the state than would be necessary to fill these positions, those not required would belong to the unemployed class. If a person with specialized training for any particular line of work cannot get employment in the work for which he is especially trained, he is in the class of unskilled work. For instance, an unemployed teacher cannot fill the rôle of physician or lawyer or vice versa. Many persons with university degrees are

to all intent in the unskilled class when it comes to earning a living.

Socialize medicine, and the physician who may not be successful in getting on the government payroll will find himself in a position that no unskilled worker would envy.

CHARLES GODWIN JENNINGS

Dr. Charles Godwin Jennings is dead, but the spirit and philosophy of his life live on. To evaluate these one must go back to the time he entered into practice in the early eighties, when the character of his life work was in its formative stage, when ability began in reality to assert itself. Life was simple then and the relationship of the physician to his patient was more intimate, and for this very reason a great responsibility rested upon him. He was physician, friend, counselor and oftentimes nurse. The trained nurse, the telephone and the automobile were yet in the making; the hospital as a workshop was hardly known. It was truly the horse and buggy days when travel was slow and often difficult.

It was under these trying conditions that Dr. Jennings became the beloved and trusted physician. Once accepted, the family physician was then only under grave circumstances ever dismissed. He came to know the strength and weakness of every member of the family, sometimes through three and four generations. This acceptance of family responsibility was his strength and his usefulness to the community. The trained nurse, the hospital, the laboratory, the x-ray and all the advances in medicine and surgery that have come to us through the years may have aided the precision of diagnosis and the perfection of treatment, but they have not materially changed the doctor's relationship to his patient.

It was not only in the field of medical practice that Dr. Jennings was preëminent, his keen mind could not lie dormant, so within a few years after graduation we find him in the teacher's chair, engaged in hospital organization, on Boards of Health and in medical society activities, having always in mind the advancement of the medical art.

His philosophy of life—that things are here to be enjoyed—found vent in sport. He was an ardent yachtsman and fisherman and often found time to enjoy these diversions.

With his experience of many years, and his accumulated knowledge, which always kept him abreast of the times, he brought to the consulting room a mind which, though yielding to the advances of the medical, was conservative and respected.

When a man has reached the fulness of years and has lived so usefully and so intensively, his passing is but a fulfillment of the order of nature. What is more appropriate to describe his taking off than the famous epitaph in *Samson Agonistes*:

Nothing is here for tears, nothing to wail
Or knock the breast, no weakness, no contempt,
Dispraise or blame, nothing but well and fair,
And what many quiet us in a death so noble.

DIRTY DISHES

We print in this number of the *JOURNAL* a very timely paper by Dr. C. H. Benning, Director, Royal Oak Health District of Oakland County, on the matter of care or lack of it, of dishes and utensils in suburban or rural eating houses, beer gardens and places provided for public entertainment. The menace, for such he calls it, consists in the fact that many seeking licenses for such places are wholly unfamiliar with the sanitary requirements necessary for safeguarding the health of their patrons. While poor sanitation may prevail to some extent in cities, the fact that they are under the supervision of health departments mitigates the dangers to a large extent.

Dr. Benning refers to the practice of merely rinsing beer glasses, and in some instances even this is not done. The washing of dishes by hand is a practice that should be prohibited and the operation performed by dish-washing machines with water sufficiently hot that sterilization would be effected. He cites an instance in a neighboring state in which forty-one persons were infected with typhoid traced to a waiter, a walking typhoid, who had wiped and stacked dishes after they had been washed. In New York City where food handlers are under more or less regular inspection, out of 1981 foodhandlers, three cases of active tuberculosis and fifteen arrested cases were found; also, thirty-two cases of suspected syphilis and six cases of gonorrhea.

Dr. Benning presents a sanitary code that has been suggested. This code is not un-

reasonable and it should receive the consideration of every physician in the state. The writer has brought before our readers a subject that should be of paramount interest to every one more especially when we consider that Michigan's good highways and parks and lakes have produced a tourist urge during the spring and summer months. There should be sufficient influence among the profession of the state to get behind the State Board of Health and see that all places of entertainment where food and beverages are served are made safe and all health hazards eliminated.

NECESSITIES AND LUXURIES

"The farm income from the 1935 tobacco crop is estimated to be about \$249,351,000, including \$11,872,000 estimated rental and benefit payments, as announced by the Agricultural Adjustment Administration. Figures based on the December report of the Crop Reporting Board show that the farm value of the 1935 crop is tentatively placed at \$237,479,000, as compared with \$107,776,000 for the 1932 crop. The farm value does not include rental and benefit payments.

"It is estimated that the farm value of this year's tobacco crop will be about \$13,770,000 above the 1934 crop. Tentative figures indicate that the 1935 production will exceed last year's production by about 238,000,000 pounds."

We have not yet heard of any agitation against the high cost of tobacco or other luxuries. It is a very human trait that luxuries mean more to human beings than what are usually called necessities, such as food or medical care. Herbert Spencer* once made a significant observation which we quote at length.

"It has been truly remarked that, in order of time, decoration precedes dress. Among people who submit to great physical suffering that they may have themselves handsomely tattooed, extremes of temperature are borne with but little attempt at mitigation. Humboldt tells us that an Orinoco Indian, though quite regardless of bodily comfort, will yet labor for a fortnight to purchase pigment wherewith to make himself admired; and that the same woman who would not hesitate to leave her hut without a fragment of clothing on, would not dare to commit such a breach of decorum as to go out unpainted. Voyagers uniformly find that colored beads and trinkets are much more prized by wild tribes than are calicoes or broadcloths. And the anecdotes we have of the ways in which, when shirts and coats are given, they turn them to some ludicrous display, show how completely the idea of ornament predominates over that of use. Nay, there are still more extreme illustrations: witness the fact narrated by Capt. Speke of his African attendants, who strutted about in their goat skin mantles when the weather was fine, but when it was wet, took them off, folded them up, and went about naked, shivering in the rain! Indeed, the facts of aboriginal life seem to indicate that dress is developed out of deco-

*Education—Herbert Spencer.

rations. And when we remember that even among ourselves most think more about the fineness of the fabric than its warmth, and more about the cut than the convenience—when we see that the function is still, in a great measure, subordinated to the appearance—we have further reason for inferring such an origin."

What is said of ornament is equally true of other things not necessary to the maintenance of life. However, agitation will doubtless continue against the alleged high cost of necessities, including medical care, while men and women will continue not to question the high cost of things they can do without.

"SOCIALIZED" LAW

In the December number of the JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY we commented on a paper which recently appeared in *Harpers* magazine, entitled, "The Decline of the Professions," by Harold J. Laski. The article (Laski's paper) has been read and commented upon by a large number of the profession. The attack as we intimated did not include the medical profession alone. Law came in for its share. At a banquet attended by about a thousand New York Lawyers on December 14, the subject of Laski's paper came up, when Mr. William L. Ransom, president of the American Bar Association, took occasion to warn the members of the dangers of a socialized legal profession in a socialized state. Our information is from the *New York Times*:

"Mr. Ransom's warning was based on a recent magazine article by Harold L. Laski, Professor of Political Science at London University, in which it was suggested that all lawyers receive the same pay from the government, and be assigned to clients and cases. Such a proposal, 'excites laughter and seems absurd tonight,' he said, 'but in reality is in full harmony with social philosophies which we hear advocated from high places in the United States today.'

"It is consistent with some of the steps which have already been taken along the road that leads to the submergence of individual rights and human liberties,' he continued.

"What is the alternative to that road for the legal profession? Is it merely to let matters drift and muddle along as they are? If the lawyers of the United States do not want government to organize and control the legal profession, the lawyers had better organize and govern it themselves, in the public interest.

"An independent and self-governing legal profession that cannot be commanded by retainers, cajoled by public office or intimidated by threats and charges against lawyers individually or against the profession as a whole is one of the best safeguards of freedom in the United States."

KING GEORGE V*

D. S. BRACHMAN, M.D., Detroit

The City of London Red Cross Hospital, unit of the Fifth London General Hospital, which was an ordinary busy military hospital of that time, its beds recently filled with sick and injured from France, underwent a complete change of atmosphere early one morning in the late Summer of 1916 when a telephone message was received from Buckingham Palace—"The King will visit your hospital at 10 A. M. today, and requests that there be no formal reception."

Joy, anticipation, and awe were registered in various degrees among the patients and staff, the latter beginning immediately to practice their courtesies. Nor did this leave me unaffected—the number of questions I found it necessary to ask, such as how one addresses a king, etc., would have filled a book. I was informed by one of the staff that as M.O. i/c (medical officer in charge), I would be accorded the honor of escorting the King about.

A feeling of awe such as I had never experienced before nor since, rapidly enveloped me. At five minutes to ten there appeared about the hospital many men, singly and in pairs. They seemed to be leisurely walking about. We soon realized that Scotland Yard was on the job. Punctually at ten the King's Equerry, Captain Cust, arrived, rapidly looked about and selected a place for the presentation. Immediately following, both the King and Queen appeared, our first intimation that we were to be favored by both Their Majesties.

I have always felt that my face must have betrayed my feelings, for King George, with a very genial smile, shook hands with me and immediately opened discussion. Within two minutes he made me feel entirely at ease, a feeling which lasted during the entire hour and ten minutes that he stayed.

After a few preliminary remarks, the tour of inspection began, with the first visit to a patient who was tagged P.U.O. (pyrexia of unknown origin), a frequent diagnosis at that time. I shall never forget the patients' joy as the King stopped at every bed. Occasionally King George asked some very technical question. It was apparent that his visits to the hospitals were not duty calls, but that he was deeply interested in the welfare of the patients, his subjects. I recall that the king spent some time at the bedside of an Australian who was badly wounded, asking him friendly questions. I am certain that the psychological effect of the King's thoughtfulness was at least partly responsible for the man's desire to live and was a help to him in his successful battle with death.

On entering the hospital kitchen, a nurse, who was busy at the stove, showed her great embarrassment at being caught unawares and courtied rather awkwardly. King George apologized for the intrusion and said, "I am very much interested in kitchens. I occasionally do some cooking myself."

Both the King and the Queen again shook hands with me upon leaving the hospital, and though there was a sense of relief in knowing that Their Majesties' visit was completed without any untoward incidents, it is impossible to express the inward joy and satisfaction I felt following this experience.

King George's presence on the throne steadied the

*Dr. D. S. Brachman of Detroit served as medical officer in charge of the London Red Cross Hospital from July, 1916, to July, 1918. The hospital is located in the city of London which occupies an area of one square mile which includes the Tower, the Bank of England, the Mansion House, St. Pauls, et cetera. Dr. Brachman lived in London ten years in all, eight years following the Armistice. He has kindly contributed this brief close-up of the late King at our request.—Ed.

people through many adversities. There was simple cheer in his quiet smile. He represented the whole people and the interests of the nation. One must add here that the solid qualities of the English people helped make King George the beloved monarch he was, just as he, by his sterling qualities, led his subjects through critical times.

With heavy hearts the nation moves on. An invisible force compels one to join Britain in—"The King is dead. Long Live The King."

Modern Concepts of Roentgen Therapy in Cancer

W. Edward Chamberlain, Philadelphia (*Journal A. M. A.*, Dec. 7, 1935), tabulates the history of roentgen therapy in cancer from the beginning (1896) down to the present day. In spite of a better knowledge of the limitations of the methods, roentgen therapy is being used more extensively today than at any previous time. This fact alone is sufficient evidence that the method has proved merit, for the present vogue is based not on superstition or wishful thinking but on sound knowledge and proved fact. Improvements in apparatus, while immensely valuable, have had small part in promoting this increasing use of irradiation. The important advances have been in the knowledge of how best to divide the dose, how best to preserve the integrity of the normal tissues, and how large a total dose to administer in a given case. These are the advances that deserve attention. That preoperative irradiation is still in its experimental stages, few will deny. Perhaps it is still too soon to include it as one of the important advances in the present state of our knowledge. Nevertheless, the method is growing rapidly in favor of the surgeon and there is evidence that its use is beginning to rest on a scientific basis. The routine employment of postoperative irradiation has always rested on unscientific thinking. To the thinking radiologist it has often seemed that since radiologic cure rests on tumor cell sensitivity and tissue response to irradiation rather than on the numerical count of tumor cells, the radiologist who can "take care of the residual tumor cells" after a surgical operation might have taken equally good care of the entire tumor, especially in view of the fact that his aim is better and his therapy less hindered when he is treating a tangible tumor, not an intangible ghost. The author is not advocating the complete scuttling of all forms of postoperative irradiation in every case. Neither is he advocating the abandonment of surgery in favor of irradiation in carcinoma. He does feel, however, that the decreasing emphasis on routine postoperative irradiation is evidence of progress, toward the substitution of correct thinking for poorly founded superstition. Under unsolved problems for the future he discusses two questions: 1. Will the use of higher voltages and thicker filters (i.e., shorter wavelengths) increase the percentage of five-year cures? 2. Can surgery prevent the late recurrences of tumors that have apparently completely regressed? Today the radiologist and the surgeon stand face to face, each in need of the other's help, each ready to do his proper share of the work of combating cancer. The radiologist is just as anxious to avoid taking human life by depriving a patient of the benefits of properly indicated surgery as the surgeon is anxious to avoid the futile mutilation of a patient who might better be treated by irradiation. Their brotherhood is made more complete by their common knowledge that neither has the final answer to the cancer problem: that real coöperation between physician, surgeon, pathologist and radiologist constitutes the best armamentarium in the present-day battle with cancer.

BE PREPARED FOR YOUR CANCER PATIENT

CARCINOMA OF THE GASTRO-INTESTINAL TRACT*

By means of an educational campaign that is now being carried out by the Cancer Committee of the Michigan State Medical Society, the layman is being familiarized with the early symptoms and signs—the danger signals—of cancer, so that he may be prompted to report them early. If the patient is thus aroused it means that we as physicians must coöperate in our minds better than ever the early symptoms and signs in order that we may be ready to meet the demand that we hope is coming. As a matter of fact, each of us should be a leader in this fight against cancer, rather than be content to follow or fall in line.

Cancer of the gastro-intestinal tract ranks with the most frequent types of cancer.

Stomach

Cancer of the stomach constitutes in the neighborhood of 15% of all cancers. It is more common in men than in women, for the same reason, probably, that there is more cancer of the skin and of the mouth in men. It is generally recognized that chronic irritation of one kind or another is the exciting cause of cancer in most instances. The skin, in the case of men, is subjected to more irritation by reason of their habits and occupations. They are less mindful of oral hygiene, hence their tissues are subjected to more chronic irritation of these parts, and consequently more cancer. While it has not been proved that chronic irritation causes cancer of the stomach, there is, nevertheless, no good reason to assume that the mucosa of the stomach should react differently to irritation than other tissues. The stomach is probably the most abused organ of any, and in this respect men are greater offenders than women. Everything is "dumped" into it—hot foods and drinks, coarse foods, poorly masticated foods, alcohol to excess, and, in addition to this, infection carried from an unclean mouth.

*This is the third contribution sponsored by the Cancer Committee of the Michigan State Medical Society.

The early symptoms of cancer of the stomach are notoriously vague, indeterminate and misleading, and because of this the patient too often considers them as "dyspepsia" and consequently no heed is given them. To the physician the early clinical history and physical findings of cancer of the stomach will not allow him to differentiate it from functional disturbances, a polyp, an ulcer, a gallbladder, or possibly an appendix. He should never fail to think of cancer in a patient of 35 years, or over, suffering from any form of indigestion that tends to persist, especially so if he has always had good digestion. In the case of any suspicion a searching investigation must be made. It is to include the family history (for cancer), present illness, physical examination, gastric meal, stool, blood and x-ray examinations. If evidence of stomach pathology is found it becomes necessary to differentiate between a gastric ulcer and cancer. As a rule symptoms relieved by food or alkalies, acid regurgitation, high HCl content, x-ray findings of an out-pocketing defect in contrast to a filling defect, point ordinarily to the diagnosis of ulcer and away from cancer. If doubt exists, a three weeks' course of conservative ulcer treatment is recommended with repetition of the roentgen gastric study at the end of this period. In the case of ulcer there should be complete relief from all symptoms and improvement should be demonstrable by the x-ray study. If unrelieved and unimproved, an exploratory operation should be done.

A "typical case" runs something like this: Loss of appetite, distaste for meat, loss of weight, strength or both, anemia, pain, regurgitation, vomiting, obstruction, signs of visible waves, a palpable tumor mass.

Various combinations of the above symptoms and signs may go to make up a typical case, but by the time one has become "typical" it is too late to cure.

Small Intestine

Cancer of the small intestine is rare. The symptoms are usually those of partial obstruction, recurring attacks, and intestinal disorders that have not existed before.

Large Intestine

Cancer of the large intestine is about as common as that of the stomach, but it has a relatively low degree of malignancy. The location of cancer at points of normal con-

striction and sacculations favoring stasis, suggest the influence of irritating intestinal contents in their formation. The order of frequency is as follows: rectum, sigmoid, cecum, the flexures, the transverse and descending colon. Clinically, cancer of the large bowel can be divided into that of the cecum, the intervening colon and the rectum.

The clinical behavior will depend a good deal upon the location of the growth, as, for example, in the cecum, where the fecal content is liquid, there will naturally be few obstructive symptoms. There may, however, be some change in the bowel function.

In the distal colon (the storage segment) excluding the rectum, the solid character of its contents facilitate obstruction. The usual symptoms are beginning constipation, or increased constipation, later distention by gas, with occasional attacks of cramp-like pain gradually becoming more frequent and culminating finally in some cases in acute obstruction.

Cancer of the rectum, anus and recto-sigmoid constitute about 12 per cent of all cancers in the body and about 80 per cent of intestinal cancers. The frequency of cancer in this region lays a great responsibility upon the physician to investigate carefully all cases presenting any symptoms referable to the intestine or rectum. The rectum is a comparatively silent area and cancer usually causes little distress during the first six months. However, during this period there may be trivial but definite symptoms such as slight irritation or change in the character or frequency of the bowel movement. Later comes tenesmus and urgent desire to defecate, a feeling of fullness in the rectum not relieved by defecation, foul stools, the passage of mucous or blood without feces. These are usually the late signs—the "typical case." At this stage it is oftentimes too far gone to be able to effect a cure.

The diagnosis of cancer of the rectum and recto-sigmoid is readily made by proper digital and sigmoidoscopic examination. It cannot be made by laboratory examination of the stools, and rarely by barium enema. It is a common mistake to rely on the x-ray to rule out rectal cancers (this applies to some extent to cancer of the stomach and intestine).

If hemorrhoids, which are bleeding or might bleed, have been found, the physician cannot be absolved from blame if he does

not investigate higher up to make sure that there is no other lesion from which the blood is coming.

In all general examinations, and certainly in every patient who comes to the physician for any type of rectal trouble, the patient should have the benefit of routine digital and sigmoidoscopic examination. These are just as important as nose, throat or vaginal examinations. If a growth is present a biopsy specimen should be obtained. If the report is negative for cancer, and the lesion appears to be malignant, a second specimen should be taken.

Summary

Stomach.—Any person, thirty-five years of age, or over, suffering from any form of indigestion, especially so if he has always had good digestion, should be studied completely as outlined above. A gastric lesion unrelieved by adequate diet and rest should have the benefit of an exploratory operation. Surgery is at present the only treatment for cancer of the stomach. The percentage of five year cures is approximately 20 per cent. A better percentage of cures must come from earlier report by the patient and earlier diagnosis by the physician.

Intestine.—Any change in the bowel habit, or any unusual sensation reported, should cause the physician to suspect cancer. Bleeding means cancer until ruled out.

The physician cannot be held responsible for late diagnosis in patients who have failed to consult him until late in the course of the disease, but it is a sad indictment when months are allowed to pass, after the patient has consulted a physician, before a proper diagnosis is made.

Analysis of Apparent Increase In Heart Diseases

Alfred E. Cohn, New York (*Journal A. M. A.*, Nov. 2, 1935), demonstrates, by a set of curves, the net increase in circulatory diseases after the age of 60. The figures given describe the condition in the United States registration area of 1900. They may be representative of the country as a whole, but, seeing how closely diseases of all sorts are dependent on the environment, the climate in the West and South may actually require a different description of the course of cardiac disease for these states. Beginning with the age of 40 there has been a rise in the death rate from chronic cardiac diseases, decade by decade, from 1900 to 1930. From his study the author infers that there has been a rise, but only a slight one, in the death rate from circulatory diseases. The rise is due apparently to savings from deaths resulting from infectious diseases in the very decades in which the slight rise in the circulatory disease has occurred.

A MOMENT OF MEDICAL HISTORY

WILFRID T. DEMPSTER, M.A., D.Sc.
Ann Arbor, Michigan

TRANSFUSION

From early times, blood was thought to be endowed with certain life-giving qualities. Even now, in popular speech, there is an expression "The blood is the life." Blood is likewise characterized as good or bad and a particularly virile individual is spoken of as red-blooded. Such folk beliefs were adapted twenty-four centuries ago by Empedocles of Acragas in his view that the blood was the seat of the innate heat of the body. The pneuma, that subtle force basic to life, was thought to reside in the blood. This doctrine as elaborated by Erasistrates, by Galen and by medieval scholars became a fundamental part of physiological thought till the seventeenth century. It is not surprising then to find blood used in former days as a therapeutic agent, either as draughts or by transfusion, particularly as a method of reviving debilitated persons.

There are allusions to the practice of transfusion among the ancient Egyptians, Greeks and Romans. A custom which was apparently transfusion was referred to in the Wisdom Book of Tanaquila, the wife of Tarquin the Ancient. The sacred books of the priests of Apollo mentioned the operation. Reference to the practice was likewise made in an anatomical work by Herophilus. Pliny and Celsus condemned the practice. The allusions in these old works were vague and are frequently hard to interpret. For instance, an old Hebrew manuscript stated that "Naam, leader of the armies of Ben-Adad, king of Syria, afflicted with leprosy, consulted physicians who, in order to cure him, drew out the blood from his veins and put in that of another." Similarly, in Ovid's *Metamorphosis*, we are told that

Seizing a blade, Medea,
A vein in the aged throat severed
And withdrawing the blood of old age
In its place poured a life giving fluid.

Nothing of the method or efficacy of the treatment is apparent. In many references, a draught of blood rather than transfusion

might have been implied. In 1492, unsuccessful attempts were apparently made to prolong the life of the aged Pope Innocent VIII by means of transfusion. The blood of the old man was passed into the veins of three youths whose blood was in turn transferred to the veins of the pontiff. It was recorded that the three boys died, presumably from air getting into their veins. Again, the reports of this incident are vague and at variance with one another. It is difficult to reconcile the practice of transfusion with the concepts on blood formation and movement that were prevalent among the old physicians. Implications as to the practice are so common in spite of their vagueness, however, that transfusion could not have been unknown. In the early seventeenth century, several authors mentioned transfusion. Magnus Pegel commented on it in 1604. Another account of transfusion appeared in the writings of Andreas Libavius in 1615, but it is not known whether this is a description of an actual practice or a satirical comment on attempts at rejuvenation of the aged by charlatans. In 1628, Giovanni Colle of Padua discussed the effects of diet and drugs in prolonging life. He mentioned transfusion as a therapeutic aid and further suggested that medicaments might be added to the blood.

In the same year, 1628, Harvey's monumental work on the circulation of blood appeared. The humoral physiology of earlier centuries was incompatible with the circulatory mechanisms which were demonstrated. Blood took on a new importance. Scarcely two decades passed before the idea of transfusion again appeared, this time with widespread confidence that it was based on rational and proven concepts. Francesco Folli in 1652 discussed "the favorable and unfavorable opinions as to the transfusion of blood" and indicated his intention of performing a blood transfusion. During the next few years, a number of men proposed or executed experiments of significance to the history of transfusion.

Christopher Wren, the architect, experimented with animals probably as early as 1656. He ligated the veins of a living dog, opened them on the side of the ligature nearest the heart and with slender syringes or quills fastened to bladders injected substances. The injection of wine or ale into the blood stream of a dog made the animal

drunk. It was suggested that the injection method could be adapted to medicinal uses. Timothy Clarke, Robert Boyle and Nathaniel Henshaw undertook experiments which, however, were not overly successful. Johann Wepfer was said to have injected air into the vessels of an ox, a procedure followed by the immediate death of the animal. This effect was later confirmed by Redi on dogs, foxes and a hare. Johann Siegesmund Elsholz, in 1665, injected medicines into the veins of men and dogs. Blood was likewise injected. John Daniel Major also carried on experiments.

Richard Lower made the first extensive experiments and was the first to give a complete and detailed account (1667) of the technic of blood transfusion. He devised a silver cannula for insertion into the donor's artery and a second cannula of bone to be placed in the recipient's vein. In the actual technic of Lower's artery to vein transfusion, the two cannulae were connected by a tube consisting of an excised blood vessel such as the vertebral artery of a horse. About a decade earlier in France, a Benedictine monk, Robert des Gabels, discussed the possibility of transfusing blood from a healthy man or animal to an enfeebled or diseased person. He devised instruments consisting of two small silver tubes joined by a small leather bulb. The tubes were provided with valves so that pressure on the bulb closed the valves and allowed the quantity of blood to be measured. An operation appears to have been performed in 1658.

Transfusion as performed at this time resulted in the death of the donor animal. Jean Denys (1667) succeeded in preserving the life of the donor and developed the technic so that it was practical for a human subject. At this time, he made a successful transfusion into a human patient. Numerous transfusion experiments were made by such men as Edmund King, Thomas Coxe, Mauritz Hoffman, Cassini and Griffoni. From 1667 to 1670, the French Academy sponsored many studies on supposed rejuvenescence through transfusion. Then a reaction appeared.

A high percentage of transfusions, as might be expected, was unsuccessful, and many of the experiments were without real purpose. The efficacy of the procedure and its rationale were questioned. There was a popular repugnance to that type of trans-

fusion involving animal donors. Even the surgeon, Laury, pointed out that animal instincts or features would be transmitted by transfusion. The Paris Faculté de Médecin was instrumental in passing an ordinance in France which forbid transfusion without the approbation of a doctor of the Faculté. Transfusion thus discouraged became a neglected procedure.

For the next hundred and fifty years, only a handful of physicians advocated transfusion. In Germany, during the 1680's, transfusion was recommended for the cure of leprosy, fevers, scurvy and hydrocephalus. Nuck, in 1714, believed that transfusion was important in restoring blood after hemorrhage, and, in 1749, Cantwell advocated the operation in extreme emergencies. Michel Rosa of Modena performed a few experiments in 1783 from which he concluded that the blood of two species could be mixed without danger to life. Also, an exsanguinated animal could be reanimated if blood from another type of animal were introduced. Harwood (1792) likewise demonstrated the reanimation of an exsanguinated animal by transfusion. A monograph on transfusion appeared in 1802 by the Danish physician, Scheel. It was not, however, until 1818 when James Blundell published his first transfusion studies that a revival of interest in transfusion occurred.

One of Blundell's patients had died of uterine hemorrhage and it seemed that she would have survived had transfusion been available. Blundell began experiments on dogs to determine a satisfactory technic of transfusion. He opened an artery and allowed blood to escape into an open vessel. This blood was sucked into a syringe and injected into the recipient's veins immediately, only thirty seconds elapsing while the blood was out of the circulation of either the donor or recipient. Further studies were made of delayed injections of blood, and it was emphasized that the greatest speed was essential. Blundell questioned the advisability of using blood from another species. He pointed out that human donors were always easily available and that with the syringe method transfusion could be completed easily and quickly.

In the early years of the nineteenth century, serious attempts were made to discover the reasons for the high percentage of unsuccessful transfusions. Prévost and Dumas

(1821) suggested that the failure in transfusion was due to mechanical blockage of the capillaries by foreign corpuscles. Since lamb's blood had smaller corpuscles than that of other commonly used donor animals, it was considered best for transfusion purposes. In 1828, Dieffenbach studied both the syringe method and the direct artery to vein method of transfusion. He recommended defibrination of blood to prevent coagulation. Bischoff about ten years later made studies on transfusion between various animals (human, mammal, bird, frog, fish and crab) and came to the conclusion that the lethal effects occurring in transfusion were not due to the mechanical blockage of capillaries by corpuscles, but were due to the presence of fibrin in the transfused blood. Magendie (1838), however, noted that a blood filtrate free from fibrin frequently caused symptoms of distress.

Toward the middle of the nineteenth century, transfusion became a point of intense controversy; some considered it a panacea for all diseases while others denounced the practice bitterly. Both direct and indirect transfusion were in common practice and donor blood was taken from humans, sheep and dogs. The chills, fever, dyspnea and passage of blood pigment in the urine which were commonly observed came to be regarded as increasingly significant symptoms.

Oré recommended that the blood of lower animals be avoided in human transfusion, and Landois in 1875 showed that animal serum hemolyzed human blood. Armin Kohler (1877), using guinea pigs, showed that similar blood killed animals in the same way that dissimilar blood did. As a consequence, saline solutions and milk were often injected as a substitute for blood transfusion. Toward the end of the century, it was commonly recognized that about half the transfusions were unsuccessful and the method was primarily one to be used only as a last resort in severe hemorrhage or in the treatment of cholera.

Shattock (1899) studied the rouleaux formation and clumping of corpuscles in the cat, horse and human, and in mixtures of blood from these forms. By comparing his results with studies available on bacterial agglutination, he turned his attention to diseased human blood. He found that blood from afflicted patients when mixed with normal blood caused clumping in certain dis-

eases, but not in others. Shattock, misinterpreting his data, believed that diseases modified blood in such a way as to cause clumping. The true solution came in a masterly publication by Landsteiner (1901), who experimented with the sera from twenty-two normal persons. Corpuscles of one person and serum from another were mixed in hanging drop preparation, and this was examined for clumping of corpuscles. He found that his series of twenty-two sera could be grouped according to their clumping reactions into three types which he termed A, B and C.

The explanation for the severe and fatal reaction in transfusion was thus apparent. If similar types of blood were transfused, no deleterious effects should appear, while the mixing of incompatible blood of dissimilar type should result in adverse symptoms. This was found to be true in practice.

In 1907, Jansky found that there were four blood groups instead of three, and Moss in 1910 came to the same conclusion. Jansky's grouping I, II, III and IV, the first three types being equivalent to Landsteiner's C, A and B, was unfortunately not given the same symbols by Moss. His type I was Jansky's IV and vice versa. To avoid confusion, a committee headed by Hektoen in 1921 recommended that, because of priority, Jansky's classification be universally adopted. Another classification by Hirszfeld substituted the letters O, A, B and AB for Jansky's numbers, O being a universal donor and AB a universal recipient. More recently, the classification has been somewhat amplified.

While the factors of danger in mixing blood were being analyzed, another field developed to a point where it had an extensive influence on modern transfusion. This field was blood vessel surgery. In the days before antiseptic and aseptic surgery, nothing could be done for a cut or injured blood vessel beyond ligation. An inaugural dissertation by Jassinowsky in 1889 was really the first indication that blood vessels could be sutured without closure of the lumen on healing. Murphy (1897) continued experiments in which it was apparent that blood vessel surgery required the most rigid asepsis, careful handling of vessels, close approximation of the cut edges of vessels, fine sutures and careful suturing technic. The first experiments on circular

suture of arteries was performed by Robert Abbe in 1894 and by the end of the century small ivory or magnesium prostheses had been introduced by Nitze and Payr for approximating the intimal surfaces of the cut edges of vessels. Numerous studies on methods of experimental suture followed during the first decade of the present century. In 1902, Carrel had performed artero-venous anastomoses. Ullmann in the same year made an experimental transplantation of a kidney. In the next few years, Watts had experimented in vasacular surgery, and Carrel and Guthrie had performed spectacular experiments in transplantation of the thyroid, heart, intestine, kidney and extremities. Through such work, the dangers and difficulties of vascular surgery became known, and an increased confidence arose in vascular surgery.

Crile in 1907 developed a technic of transfusion by connecting the donor's artery to the recipient's vein so that there was a continuous blood vessel passageway for transfused blood. This method together with Crile's extensive experiments on transfusion had a tremendous influence in popularizing the operation. The method, however, had the disadvantage of necessitating the severing of a fairly large artery in the donor and of providing no way of measuring the quantity of blood transfused. After a decade, the method was abandoned in favor of simpler technics.

Klimpton and Brown (1913) introduced a technic in which a specially designed glass cylinder was carefully and smoothly coated on its interior with a thin layer of paraffin. Blood was collected from a donor directly into the cylinder where it could remain up to ten minutes without clotting. The contents of the cylinder could be measured and injected at any desired rate into a vein of the recipient. Lindemann, in the same year, employed a large number of syringes in succession for drawing blood from a donor's vein and rapidly injecting it into a vein of the recipient.

Unger, in 1915, devised a mechanical unit consisting of a syringe provided with a two-way stopcock. A needle inserted into the donor's vein was connected by a tube to the device, which in turn was connected by tubing and a second needle with the recipient's vein. The stopcock was so arranged that it alternately connected the syringe for blood with the donor and one containing

saline with the recipient. Blood was sucked into the syringe from the donor while saline solution flushed the tube connecting the recipient. The valve was turned and blood flowed from the syringe into the recipient while saline perfused the tube connecting the donor. Saline solution prevented stagnation of blood and clotting in the tube which for the moment was not conveying blood to or from the measuring syringe. This effective apparatus has been further modified by Brines (1923) and Feinblatt (1925).

An alternate method of transfusion appeared in 1914. Simultaneously, Huston of Belgium and Agote in Buenos Aires suggested that sodium citrate be added as an anti-coagulant to blood drawn from a donor. Lewisohn, in the next year, studied the anti-coagulant and toxic properties of sodium citrate and perfected a technic of transfusion based on the use of this chemical. In the citrate method, blood was allowed to flow into a collecting vessel where it was mixed with .2 per cent of sodium citrate. This treated or altered blood was then allowed to flow by gravity through a tube and needle into the recipient's vein. In 1923, Hartman and Cowles and Antz proposed modifications in which citrate and blood were mixed within the donor's needle.

At present, the syringe method for unmodified blood and the citrate methods vie in popularity, and there are arguments and indications for each method. Both, when efficiently handled, are safe and effective.

Ideal Patients

A medical student was advised by an old doctor to specialize in skin diseases, because:

"The patients of a skin specialist do not call him in the middle of the night nor do they ask him to visit them at their homes. They don't telephone distress messages to the country club, and send telegrams to the football stadium. Finally, they never get well, but also they never die from a skin ailment. They are perfect patients."

Insomnia

A Chinaman opened a laundry on a street between a drug store on one side and a restaurant on the other side. The druggist put up a sign: "We Never Close." Then the restaurant put up a sign which read: "Open At All Hours." The Chinaman, not to be outdone by his neighbors, put up a sign which read: "Me No Sleepee Too."

MEDICO - LEGAL DEPARTMENT

MAY DOCTORS BE COMPELLED TO TESTIFY IN COURT WITHOUT PREARRANGED EXPERT FEE?

By *Herbert V. Barbour*†

So many inquiries have come to me both by letter and when speaking before various county societies as to whether or not a doctor can be compelled to give expert testimony when no arrangement has been made to compensate him as an expert, by proper petition to the court, that I thought a brief article on this subject might be of interest to the profession.

After an exhaustive search in Michigan I have failed to find any decision exactly in point, and from my personal experience, I find that different judges make different rulings.

In one case I recall, the doctor refused to testify unless an arrangement was made for payment of his fee, or to have it guaranteed by the attorney, as he felt that even though the court allowed a fee, plaintiff was not financially responsible and he could not recover even though his fee was taxed as a proper item of costs. A conference was held between counsel for the plaintiff and the doctor, and the doctor refused to divulge the nature of his testimony. Notwithstanding his refusal the court held that before being compelled to answer, if the doctor was asked an expert question, that the attorney had to pay a fee and \$25.00 was paid to the doctor and then his testimony was unfavorable to the plaintiff.

In a case that I am presently trying, the Court ruled that a witness called by the plaintiff did not have to answer an expert question propounded by me unless I arranged to pay the witness an expert fee, and this regardless of whether or not the doctor stated he had an opinion on the subject.

Other courts have ruled differently. In a recent case which I tried the doctor refused to testify and appealed to the court on the ground that no arrangement had been made with him in reference to expert fees. Plaintiff's attorney appealed to the

†Mr. Barbour is attorney for the Medical Defense Committee of the Michigan State Medical Society.

court to compel an answer and the court ruled that if the doctor had an opinion he was compelled to answer and that he, on proper application, would fix the fee for the expert after the case was decided, and the doctor was compelled, of course, to answer, or be in contempt.

In another case, which I recently tried, a doctor was forced to remain in court most of the day, being brought there by subpoena, and when called he was asked the question as to whether or not the practice followed by defendant was the practice ordinarily followed by the average physician in like and similar localities, and the doctor raised the question of expert fees. The court again held that he was compelled to answer without a fee being paid to him in advance, and then the doctor stated that he did not know the practice of the average physician as he specialized and only knew what he did and not what any other doctor did, and of course the court held that he could not tell what his own practice was, but only the practice of the average physician practicing in his and similar localities. The doctor thus disqualified himself and was excused from further examination.

There is a statute in Michigan relative to expert fees, being Section 14223 of the Compiled Laws of Michigan, 1929, which reads as follows:

No expert witnesses shall be paid, or receive as compensation in any given case for his services as such, a sum in excess of the ordinary witness fees provided by law, unless the court before whom such witness is to appear, or has appeared, awards a larger sum, which sum may be taxed as a part of the taxable costs in the case. Any such witness who shall directly or indirectly receive a larger amount than such award, and any person who shall pay such witness a larger sum than such award, shall be guilty of contempt of court, and on conviction thereof be punished accordingly.

The following cases furnish some approximation of what courts ordinarily allow for medical testimony.

In the case of *Joy v. Ingham*, 204 Mich. 41, the court made an award of \$100.00 a day to each physician who was forced to attend, and the Supreme Court reduced the amount to \$50.00 a day.

Unless a showing is made that it is necessary for experts to remain more than one day, the court will not allow compensation for more than one day. *Security Life Ins. Co. v. Schwartz*, 221 Mich. 496.

Other cases indicate that courts should

not allow more than \$25.00 to \$50.00 a day for experts, and we know of one judge in the state who refuses to award more than \$10.00 a day to any expert, which, of course, is grossly inadequate.

It would seem from a reading of this statute that an attorney cannot arrange in advance for the expert witness fees to a doctor. Unless the Supreme Court interprets this statute it would seem that a doctor would be more or less at the mercy of the court. For instance, suppose that a doctor refuses to testify and the court compels him to answer with the understanding that a fee will be fixed and taxed against the party not prevailing in the suit, which would mean that the doctor would receive some fee provided the plaintiff or defendant against whom costs were taxed is financially responsible, but he would have no recourse if plaintiff or defendant were not.

It seems to me the doctor is in the position of being compelled to attend court and give valuable time and information without more compensation than the ordinary witness fee. The remedy is not clear but it seems to me that some action might be taken with the Association of Judges and if they concluded it is discretionary with the trial judge, then have a uniform rule providing for the compensation of expert testimony to be deposited with the clerk of the court before a physician is compelled to give his opinion.

Another method to secure a determination would be for a doctor to refuse to testify and then be fined for contempt of court and take an appeal to the Supreme Court and secure an interpretation of the statute to which reference has already been made.

Absence Explained

"I've not seen your 'usband lately, Mrs. Smith. Where is he?"

"'E's 'ad a seizure, Mrs. 'Iggins. 'E'll be away for a month or so."

"I'm sorry to ear that. What sort of a seizure was it?"

"A violent one. Two policemen an' a sergeant."

The Real Boss

Agent—Where's the boss? Is he in?

Proud Father—Yes, he's asleep upstairs in his crib.

Proceedings of The Council of the Michigan State Medical Society

HIGH LIGHTS: Five Year Plan of Michigan State Medical Society Presented; Schedules A, B, C, D Revived as of July 1, 1936; Medical Defense Dues Reduced to One-half Dollar; Secretary, Treasurer, Editor, Executive Secretary, and Medico-Legal Committee Elected; Annual Meeting—Book-Cadillac Hotel, Detroit; Scientific Exhibits Committee Appointed; Budget for 1936 Adopted; Decision Re Contracts to Provide Medical Care to Indigents; Brochure on Sickness Insurance to be Published; Postgraduate Certificates to be Awarded.

THE Council of the Michigan State Medical Society met for its Mid-winter Meeting in the Statler Hotel, Detroit, on January 15-16, 1936, with the following Councilors and Officers presents: Dr. Henry Cook of Flint, chairman, Dr. T. F. Heinrich of Port Huron, vice chairman, Dr. F. A. Baker of Pontiac, Dr. F. C. Bandy of Sault Ste. Marie, Dr. A. S. Brunk of Detroit, Dr. C. E. Boys of Kalamazoo, Dr. Henry R. Carstens of Detroit, Dr. H. H. Cummings of Ann Arbor, Dr. W. A. Manthei of Lake Linden, Dr. J. E. McIntyre of Lansing, Dr. Vernor M. Moore of Grand Rapids, Dr. Julius Powers of Saginaw, Dr. Frank E. Reeder of Flint, Dr. Thomas P. Treynor of Big Rapids, Dr. Paul R. Urmston of Bay City, Dr. B. H. Van Leuven of Petoskey, and Dr. R. L. Wade of Coldwater; President Grover C. Penberthy of Detroit, President-Elect H. E. Perry of Newberry, Treasurer Wm. A. Hyland of Grand Rapids, Secretary Clifford T. Ekelund of Pontiac, and Editor J. H. Dempster of Detroit. Also present Dr. Angus McLean and Dr. Wm. J. Stapleton, Jr., of Detroit, representing the Medico-Legal Committee; Dr. J. D. Bruce of Ann Arbor, representing the Advisory Committee on Post-Graduate Education; Drs. L. J. Hirschman, H. A. Luce, and J. M. Robb of Detroit; and Executive Secretary Wm. J. Burns. Absent: Dr. Harlan MacMullen of Manistee.

Forty-nine individual items were presented to The Council in three sessions, beginning January 15 at 2:00 P. M. and continuing through two days. Many of the problems were of such a nature that they required reference to a Council Committee which sandwiched in extra work and study between the three busy sessions.

FIRST SESSION OF THE COUNCIL

At the first session of January 15, the following matters among others were considered: Reports from each Councilor on the condition of the profession in his District, the annual reports of the Secretary, the Editor, the Medico-Legal Committee, and the Postgraduate Advisory Committee, and plans of the Section Officers and President for the 1936 Annual Meeting in Detroit.

SECRETARY'S ANNUAL REPORT FOR 1935

I HAVE the honor to present my first report to The Council as Secretary of the Michigan State Medical Society.

Your Secretary is placed in an apologetic position by the circumstance which requires him to cover ten months of the term of office of his predecessor, and two months during which the business affairs of the Society have been conducted under the direction of the Executive Secretary.

During the two and a half months that your Executive and Medical Secretaries have been in office, very little, if any, confusion has arisen because of their geographical separation, although there has been a little delay in one or two minor instances. Our very able Executive Secretary has grasped every opportunity to be of service and has kept pace with the intense activity of the Executive Committee and the several standing and special committees in a way that augurs well for the future of the society. The wisdom of having an Executive Medical Secretary as the legally responsible agent for the Michigan State Medical Society, and the happy choice of Mr. Burns for that office, have been amply proven. The constitutional stumbling-block which requires that amendments lay over a year before final ratification, leaves the office, but what could not be accomplished in principle is being accomplished in fact, thanks to the recommendation given The Council by the House of Delegates.

Total membership for 1935 reached the very satisfactory figure of 3,650. Upwards of 160 of these were admitted during the last two months by the payment of dues for the last quarter, as provided in Section 3 of Chapter 1 of the By-laws. In addition to these, there were two members who paid up arrears for 1933, and twenty for 1934. The total income to the State Society from dues for the year amounted to \$30,175.56, exceeding the expectations of the budget by \$1,700.00. A membership tabulation is made a portion of this report.

There are 138 unpaid dues, as compared with 175 of a year ago. Eleven counties showed losses in membership totalling 19; 26 showed gains totalling 276, making a net gain for the year of 257, as compared with 233 of last year.

MID-WINTER MEETING OF COUNCIL

Membership Record

County	1934	1935	Loss	Gain	Unpaid	Deaths
Alpena	15	15	..	..	..	1
Antrim-Charl.-Emmet- Cheboygan	27	31	..	4	1	1
Barry	15	17	..	2	1	..
Bay	64	65	..	1	2	..
Berrien	45	55	..	10	2	..
Branch	16	17	..	1	1	..
Calhoun	109	110	..	1	6	1
Cass	11	11	..	..	1	..
Chippewa-Mackinaw	16	17	..	1	..	..
Clinton	11	13	..	2	..	..
Delta	23	22	1	..	..	..
Dickinson-Iron	19	19	..	..	1	..
Eaton	26	25	1	..	1	..
Genesee	142	155	..	13	..	2
Gogebic	24	25	..	1	..	..
Gd. Trav.-Leela-Benzie	25	27	..	2	..	..
Gratiot-Isabella-Clare	33	32	1	..	4	..
Hillsdale	21	26	..	5	..	..
Houghton	38	35	3	..	2	..
Huron-Sanilac	26	29	..	3	..	..
Ingham	113	124	..	11	..	1
Ionia-Montcalm	36	35	1	..	1	..
Jackson	73	82	..	9	4	..
Kalamazoo	128	131	..	3	..	..
Kent	216	216	..	..	10	..
Lapeer	14	14	..	..	2	..
Lenawee	34	35	..	1	..	..
Livingston	16	16	..	..	2	..
Luce	9	9	..	..	..	..
Macomb	36	37	..	1	4	..
Manistee	15	15	..	..	..	..
Marquette-Alger	33	33	..	..	1	..
Mason	10	9	1	..	1	..
Mecosta	19	18	1	..	..	..
Menominee	10	10	..	..	..	1
Midland	10	11	..	1	..	1
Monroe	32	34	..	2	2	1
Muskegon	66	69	..	3	..	1
Newaygo	10	12	..	2	..	..
Oakland	98	101	..	3	6	..
Oceana	11	11	..	..	..	1
Otsego-Montm.-Crawford- O-R-O	13	13	..	..	1	..
Ontonagon	5	5	..	..	..	..
Ottawa	32	35	..	3	2	..
Saginaw	93	91	2	..	..	..
Schoolcraft	5	5	..	..	..	..
Shiawassee	29	29	..	..	..	..
St. Clair	44	40	4	..	3	..
St. Joseph	17	15	2	..	1	..
Tuscola	30	30	..	..	..	..
Washtenaw	139	152	..	13	11	2
Wayne	1271	1449	..	178	64	8
Wexford	20	18	2	..	1	..
	3393	3650	19	276	138	21
		3393		19		
Gain for 1935.....		257		257		

24 other deaths.
The 21 deaths were those who had paid 1934 dues, but not 1935 dues, were reported dead, including two honorary members.

Deaths in 1935

It is fitting and proper that we pause at this point in memory of our members who have passed on to their great reward. Our records show that 45 members in 26 county or district societies died during 1935. They are listed as follows:

ALPENA COUNTY *Dr. John S. Jackson Alpena, Michigan	DELTA COUNTY Dr. David N. Kee Gladstone, Michigan
BAY COUNTY *Dr. David T. Smith Omer, Michigan	GENESEE COUNTY *Dr. Francis H. Callow Mt. Morris, Michigan
BERRIEN COUNTY Dr. W. T. Bertrand Coloma, Michigan Dr. Louis A. King St. Joseph, Michigan	*Dr. J. G. R. Manwaring Flint, Michigan
CALHOUN COUNTY *Dr. George B. Gesner Marshall, Michigan	GRAND TRAVERSE- LEELANAU-BENZIE COUNTIES Dr. Frank Holdsworth Traverse City, Michigan

*Members in 1935.
†Honorary members.
Others were members in 1934 but not in 1935.

GRATIOT-ISABELLA- CLARE COUNTIES

Dr. W. F. Clute
Clare, Michigan

LAPEER COUNTY

Dr. C. M. Braidwood
Imlay City, Michigan

LUCE COUNTY

Dr. Jean B. Christie
Newberry, Michigan

MARQUETTE-ALGER COUNTIES

Dr. L. L. Youngquist
Marquette, Michigan

MASON COUNTY

Dr. E. G. Gray
Ludington, Michigan

MENOMINEE COUNTY

*Dr. Robert A. Walker
Menominee, Michigan

MIDLAND COUNTY

*Dr. Edw. J. Dougher
Midland, Michigan
Dr. C. V. High, Sr.
Midland, Michigan

MONROE COUNTY

*Dr. Philip D. Amadon
Monroe, Michigan
Dr. L. F. Newbern
Monroe, Michigan

MUSKEGON COUNTY

*Dr. Frank B. Marshall
Muskegon, Michigan
†Dr. John Stoddard
Muskegon, Michigan

NORTHERN MICHIGAN

*Dr. William R. Stringham
Cheboygan, Michigan

OAKLAND COUNTY

†Dr. E. A. Christian
Pontiac, Michigan
Dr. James Murphy
Pontiac, Michigan

OCEANA COUNTY

*Dr. W. L. Griffin
Shelby, Michigan

SAGINAW COUNTY

Dr. G. Harry Ferguson
Saginaw, Michigan
Dr. T. L. Ryan
Saginaw, Michigan

SAINT CLAIR COUNTY

Dr. C. H. Ainsworth
Saint Clair, Michigan

SAINT JOSEPH COUNTY

Dr. H. J. Bush
Constantine, Michigan

SHIAWASSEE COUNTY

Dr. Walter S. Bell
Elsie, Michigan

TUSCOLA COUNTY

Dr. W. A. Crooks
Wahjemequa, Michigan
*Dr. N. J. Mallow
Gagetown, Michigan

WASHTENAW COUNTY

*Dr. Robert C. Dalby
Ann Arbor, Michigan
*Dr. Chas. F. Unterkircher
Saline, Michigan

WAYNE COUNTY

*Dr. Geo. J. Baker
Detroit, Michigan
*Dr. F. P. Bender
Detroit, Michigan
*Dr. J. W. Cunningham
Detroit, Michigan
*Dr. Marian N. Fisk
Royal Oak, Michigan
Dr. Edward H. Hayward
Detroit, Michigan
Dr. Ruby D. Hicks
Detroit, Michigan
Dr. H. Edward Knight
Detroit, Michigan
*Dr. Charles F. Kuhn
Detroit, Michigan
*Dr. C. G. Lehman
Detroit, Michigan
*Dr. Chas. W. McColl
Wyandotte, Michigan
*Dr. Isaac L. Polozker
Detroit, Michigan
*Dr. H. R. Varney
Detroit, Michigan

Financial Status

The fiscal year closed on December 28, and the accompanying statement of the auditors, Ernst & Ernst, depicts the financial status of the society as of that date. Several points of interest are disclosed by this report which deserve especial attention.

1. The auditors find justifiable an increase in the net worth of the Society of \$3,359.20, which is largely accounted for by an increase in the quoted market value of the invested funds.

2. One apparent contradiction is the decrease of \$482.56 in membership fees as compared with the increase in membership from 3,393 to 3,650. This is accounted for by the fact that in 1934, \$6.00 out of the \$8.50 from each member remained for Society Activities, after deduction for Medico-Legal Defense and for THE JOURNAL, whereas in 1935 the amount was only \$5.50. In 1934 only \$1.00 was allocated for Medico-Legal Defense, but in 1935 this figure was restored to \$1.50.

3. The business affairs of THE JOURNAL deserve considerable attention. Advertising sales increased by \$1,014.31. Since no unusual efforts were made to secure more advertising, this increase is due entirely to the upturn in business. It would seem that this source of revenue might be increased even more toward making THE JOURNAL entirely self-supporting, as is actually the case with a number of other state journals. This will require an increase of more than 50 per cent in advertising revenue.

Based upon the customary allocation of \$1.50 from each member's dues, THE JOURNAL showed a profit in 1935 of \$1,263.87, as against \$1,439.67 in 1934. The cost of printing THE JOURNAL in 1935 was \$8,412.36, as against \$7,466.28 for 1934. The cost by

months was uniformly higher throughout 1935, with the exception of July and August. This increase is not attributable entirely, or even largely, to the increase in the size of *THE JOURNAL*, but represents an actual increase in cost of labor and materials.

It is to be noted in the statements of assets and liabilities there is included under assets an item of \$1,558.29, which represents the sum paid to the Bruce Publishing Company to liquidate the claim of the Bruce Publishing Company for the unsold copies of the *Medical History of Michigan*. Your Secretary envisions the prospect of carrying this item on the inventory of the Society for years to come unless some effort is made to dispose of these volumes. It has been recommended that the Rackham Fund be contacted as potential purchasers of copies to be placed in high school libraries throughout the state.

This really excellent work deserves far wider distribution than it has had, and this Council might very advisedly consider making copies available to hospital libraries without charge to such libraries as might make formal request.

Other state societies have found it expedient to give Christmas presents to various state officials and legislators, and have chosen a yearly subscription to "*Hygeia*" as such a gift. Your Secretary puts the suggestion in the form of a question, which this Council in its wisdom will better judge. Would a gift of this *Medical History* be appreciated at its full worth by such recipients as have been suggested?

The Medico-Legal Defense Fund

From time to time the suggestion has been made that the \$1.50 contributed by each member to the Medico-Legal Defense Fund be discontinued. The House of Delegates and the Council have already taken appropriate action on this suggestion, action which can be shown to be sound by comparison with experience in other states. The simple fact that we have a Medico-Legal Defense Fund unquestionably results in lower insurance premiums for our members. The current rates offered to professional men in Michigan are, as far as one can determine, as low as any in this country, and a good deal lower than some. As a matter of fact, one other state society which has not provided for Medico-Legal Defense in its organization, finds that members practicing in certain localities in that state cannot obtain medico-legal insurance at any price. The mutual contribution of \$1.50 from every member of the society does more to cement the local membership in the event of a suit than is readily realized except through actual experience. It is to be noted with gratification that, whereas in 1933 the drain upon this fund was so considerable that it caused a deficit, not only for that year, but for 1934 as well, in 1935 actual disbursements were less by \$2,380.74 than the allotment for this purpose from dues. This, plus the increase in the value of invested funds, and interest thereon, brings the total accumulated reserve for Medico-Legal Defense to \$15,567.11.

In the Black

The year has ended in the black in spite of the recently increased costs of administration which could not be taken into account when the budget was prepared, and in spite, also, of the payment to the Bruce Publishing Company of \$1,558.29.

Annual Meeting

The 1935 annual session constituted an experiment, results of which should prove a valuable guide for years to come. There is perhaps no other community of any size in the entire state that is further removed from more people in the state than is Sault Ste. Marie. The attendance, as anticipated, was

small, but whatever lack of numbers there may have been was made up by the quality of the program and the enthusiasm of those in attendance. From the standpoint of attendance an excellent showing was made by the members of the Upper Peninsula. Of a total of 170 members from that portion of the state nearly one-third, or 52, registered at Sault Ste. Marie. Two hundred fifty-four members came from the Lower Peninsula, making a total of 306. Auxiliary members, guests and exhibitors brought the total registration to 444.

At this annual session there were no Section Meetings. The Scientific Assembly met as a single unit. The result was an especially fine scientific program which was enthusiastically received; its quality was at least as high as any ever put on by the Michigan State Medical Society.

In spite of the remoteness of the meeting place there was an excellent scientific exhibit. The Council took recognition of this fact by awarding certificates of merit as expressions of appreciation, as well as in recognition of the excellence of the scientific work done by the exhibitors. This is a splendid precedent, and Section Officers and many others have expressed unstinted approval of the Council's action in providing suitable recognition of scientific endeavor.

Travel expenses were necessarily very great at this meeting and the total cost of the session was not offset by revenue from commercial exhibitors to the extent that may be expected at meetings in large centers of population. The net expense for the annual session in 1935 came to \$693.00 as against \$21.55 in 1934.

Secretaries' Conference

By authority voted by the Executive Committee at its meeting of November 13, your Secretary has proceeded with plans for an all-day conference for county officers to be held in Lansing on Sunday, January 26. Your Secretary wishes to take this opportunity to express his appreciation for the enthusiasm with which his tentative program has been received. Every speaker approached has offered his hearty coöperation and has accepted the assignment given him. Perhaps the most important place on the program is to be given to a round table discussion to be led by our chairman, Dr. Henry Cook, for the discussion of the two most pressing problems of medical economics. Discussants has been chosen and primed for participation in this round table in the anticipation that county officers in attendance will not use the time to dilate upon their personal experiences and case histories, but will learn precisely how they may be able to evolve working plans in their own counties patterned after successful arrangements already in operation.

In the evening there will be a dinner to be followed by an address by Dr. R. L. Sensenich, of South Bend, Indiana, President of the Indiana Medical Association, a very able speaker and one thoroughly conversant with the economic problems confronting organized medicine. This should prove to be an entertaining and instructive high light of the conference.

Committees

With the accomplishments of the 1935 committees you are already well acquainted. Your Secretary is particularly enthusiastic about the outlook for 1936, and the already considerable accomplishments of the standing and special committees authorized.

The work of the Public Relations Committee, under the vigorous chairmanship of Dr. L. F. Foster, deserves special mention. The gentlemen of this committee have contributed intensely and continuously of their time and energy at great personal sacrifice. They have been away from their prac-

tices frequently, and have travelled long distances over hazardous, icy roads to carry out the responsibility with which they have been charged, namely, the organization of medical filter boards in every county through which commitment of afflicted children is to be effected under the new provisions established by joint resolution with the Probate Judges, Hospital Administrators and the Michigan State Medical Society. This Committee has also evolved a plan for achieving concerted action upon any project through the membership of every county society. The Committee is, in point of fact, an instrumentality through which any program promulgated by any Committee of the State Society and approved by the Executive Committee and the Public Relations Committee, shall be effected and integrated through the entire organized profession in the State.

The Legislative Committee has had monthly meetings and has mapped out a great deal of work for itself. At the present time it is engaged in the study of several specific legislative problems which will be presented in due course.

The Committee on Medical Economics likewise is already organized and working, and has set up for itself a number of important studies, the nature and scope of which will be reported to you in some detail. Its sub-committee on relief medicine has already collected a great deal of data during the past two months, which will be found interesting, if not surprising.

The Preventive Medicine Committee, the Maternal Health Committee, the Cancer Committee, and Special Contact Committee to Government Agencies and Allied Groups have also met and organized themselves with definite programs. It may with confidence be stated that the Michigan State Medical Society has never had greater enthusiasm and wholehearted response from committeemen, and the President of our Society and the Council are to be congratulated upon having selected so fine a group of able men to work out its several problems.

Your Secretary takes this occasion to express his sense of profound responsibility. Having been relieved of the more routine aspects of administration, he has devoted a considerable amount of attention to the more pressing problems which perplex organized medicine in all parts of the country. He has felt it his function to collect and correlate factual material for use by committees and to aid them in programs under consideration. He has recently spent considerable time in the preparation of a brochure setting forth some opinions of organized medicine on the question of state or socialized medical care, and attempting to show that the fruits of medical science may be made available through the improvement in, and correlation among, already existing agencies. This brochure will, of course, not be published until it has been amplified and revised and brought into complete conformity with the point of view of the officers, committees and Council. While it is intended to provide material for students debating the question of State Medicine, it also sets up a goal which has been envisioned by many members of the Michigan State Medical Society as the most logical mechanism to provide better distribution of medical care to people not able to provide it for themselves.

Your Secretary concludes his report with the simple statement that he finds interest and zest in his work and is grateful for the measure of confidence that has been reposed in him by this honorable body.

Dated, January 15, 1936.

CLIFFORD T. EKLUND, M.D., *Secretary*.

ANNUAL REPORT OF CERTIFIED PUBLIC ACCOUNTANTS FOR 1935

WE HAVE made an examination of the balance sheet of the MICHIGAN STATE MEDICAL SOCIETY as at December 28, 1935, and of the statement of income for the fiscal year ended at that date. In connection therewith we examined or tested accounting records of the Society and other supporting evidence, and obtained information from officials and employees of the Society. We also made a general review of the accounting methods and of the operating and income accounts for the year, but we did not make a detailed audit of the transactions.

In addition to our examination of the balance sheet and statement of income, we made certain test checks of the recorded cash transactions and of other data supporting the accounts and records, as hereinafter outlined.

We also reviewed the receipts and disbursements in the funds administered by the Society.

The Society was incorporated as a corporation not for pecuniary profit on September 17, 1910, under the laws of the State of Michigan. It is affiliated with the American Medical Association and charters county medical societies within the State. The purpose of the Society is the federation and protection of the medical profession and the extension of medical knowledge. In the furtherance of these purposes the Society publishes THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY.

Financial Analysis

The balance sheet included herein, in our opinion, fairly presents the position of the Society as of December 28, 1935, on the basis outlined in this report. The following summary shows a comparison of the assets and liabilities at the beginning and end of the year:

ASSETS			
	Dec. 28, '35	Dec. 24, '34	Increase
Cash	\$ 6,943.90	\$ 3,405.80	\$3,538.10
Notes and accounts receivable	563.20	781.77	*218.57
Inventory	1,558.29	.....	1,558.29
Securities—at cost, less allowance	24,909.00	20,710.00	4,199.00
	<u>\$33,974.39</u>	<u>\$24,897.57</u>	<u>\$9,076.82</u>
LIABILITIES			
Accounts payable	\$ 685.73	\$ 161.50	\$ 524.23
Liability for funds administered	1,038.31	376.30	662.01
Unearned income	1,270.00	1,012.11	257.89
Reserve for Medico-Legal Defense Fund	15,413.24	11,139.75	4,273.49
Net worth	15,567.11	12,207.91	3,359.20
	<u>\$33,974.39</u>	<u>\$24,897.57</u>	<u>\$9,076.82</u>

*Denotes decrease.

Of the increase in the net worth in the amount of \$3,359.20, \$2,636.25 arises from a reduction in the allowance necessary to reduce the value of securities in the general fund to quoted market values.

Notes receivable for dues represents the uncollected portions of notes taken in settlement of 1931, 1932 and 1933 dues.

Accounts receivable from advertisers and exhibitors were analyzed as to date of charge and are classified in comparison with the balances at December 24, 1934, as follows:

MID-WINTER MEETING OF COUNCIL

Date of Charge	Dec. 28, 1935		Dec. 24, 1934	
	Amount	Per Cent	Amount	Per Cent
October, November and December	\$568.92	60.04	\$ 543.68	53.00
July, August and September	28.50	3.01	43.75	4.16
January to June, inclusive	72.91	7.70	66.75	6.51
Prior to January 1	277.17	29.25	372.55	36.33
TOTAL	\$947.50	100.00	\$1,026.73	100.00

The balances due from county societies represent dues collected for the Society and subsequently impounded in depository banks. As the funds are released by the banks, they are forwarded to the Society by the county societies.

Accounts receivable for medical histories sold represent charges made in prior years, with but \$5.00 liquidated during the year.

Based upon our analysis of the notes and accounts and conference with the Executive Secretary as to their collectibility, it is our opinion that the allowance in the amount of \$650.00 is sufficient to care for losses anticipated at the date of this report. During the year accounts and notes were written off as worthless or compromised in the amount of \$143.30.

The inventory represents the cost of approximately 385 sets of the "Medical History of Michigan," a two volume work published by the Society some years ago. During the year the Society purchased the unsold copies remaining in the printer's hands at a price making it possible to sell them at considerably reduced prices.

An exhibit of securities owned is included as a part of this report, which sets forth the par value, cost and quoted market values at December 28, 1935. Unlisted securities have been valued from information furnished by brokers as to the latest bid and sales prices. During the year, no securities were purchased or sold but two changes in securities held were caused through reorganizations. Bonds of the National Gas & Electric Corporation in the amount of \$2,400.00 par value were exchanged for 96 shares of \$10.00 par value common stock of the same corporation, and 5 per cent bonds of the Associated Gas & Electric Company, due in 1950, were exchanged for 4 per cent income bonds of the same company, due in 1978. Matured coupons on bonds not in default which were not cashed at December 28, 1935, have been included at par value but no other accrued interest is included in the assets.

As far as we could ascertain, provision has been made for all known liabilities at December 28, 1935. We have included herein a statement in summarized form of the receipts and disbursements of the fund administered for the Joint Committee on Public Health Education.

Remittances for 1936 dues have been shown as unearned income and, in our opinion, represent income applicable to the ensuing year, except for that portion which will be credited to the Medico-Legal Defense Fund when it is determined with what share of 1936 dues that fund will be credited.

An analysis of the changes in the Medico-Legal Defense Fund is included as an exhibit herein. The income of this Fund, consisting of \$1.50 from each member's annual dues and interest received on bonds allocated to the Fund was \$2,835.74 in excess of the amount expended. During the preceding year but \$1.00 of each member's annual dues was credited to this Fund.

Surety bonds on the Secretary and Treasurer in the amounts of \$10,000.00 and \$25,000.00, respectively, were examined by us.

Operations

We have made an examination of the statement of income and expense for the fiscal year ended December 28, 1935, and in connection therewith we examined or tested accounting records of the Society and other supporting evidence, and obtained information and explanations from the Executive Secretary and bookkeeper; we also made a general review of the accounting methods and of the operating and income accounts for the year. The scope of our tests of the detail of transactions during the year are outlined in a later section of this report.

The net income for the year decreased in excess of \$5,000.00 due primarily to increased expenses which were incurred as a result of increased activities of the Society. The increase in the income from the JOURNAL was more than offset by increased costs.

Scope of Examination

The scope and nature of our examination and the extent of the tests of the detail transactions are outlined in the following comments:

Cash on deposit was verified by direct correspondence with the depository bank and reconciliation of the balance reported with the amount shown herein. The certificate of deposit was inspected during the course of our examination. Cash receipts for several months were traced to the deposits shown by the bank statements on file. The recorded cash disbursements for three months selected by us were compared with canceled checks, invoices and other memoranda.

Notes receivable were inspected by us during the course of our examination. Advertisers' and other accounts were found to be in agreement with trial balances of the individual accounts. We did not correspond with any of the debtors to confirm the correctness of the book records.

Securities owned were inspected by us and market quotations were obtained to ascertain their approximate market value at December 28, 1935.

We did not correspond with vendors as a test of the accounts payable.

In addition to the tests heretofore outlined, we tested the amount of dues collected by comparison with the record of membership certificates issued and with other membership records. Interest received was verified by inspection of unclipped coupons. We also reviewed the disbursements made for the account of the Medico-Legal Defense Fund.

In our opinion, based upon our examination, the accompanying balance sheet and statement of income fairly present, on the basis herein outlined, the position of the Society at December 28, 1935, and the results of its operations for the year. Further, it is our opinion that the statement has been prepared in accordance with accepted accounting principles and on a basis consistent with the preceding year, except for the increase in the portion of membership dues allocated to the Medico-Legal Defense Fund.

ERNST & ERNST,

Certified Public Accountants.

January 8, 1936.

MID-WINTER MEETING OF COUNCIL

BALANCE SHEET MICHIGAN STATE MEDICAL SOCIETY DECEMBER 28, 1935

Assets		
Cash		
On deposit—Lansing National Bank.....	\$ 2,943.90	
Certificate of deposit—Old Kent Bank—Grand Rapids.....	4,000.00	
		\$ 6,943.90
Notes and Accounts Receivable		
Notes receivable for dues—past due.....	\$ 87.50	
Accounts receivable:		
Advertisers and exhibitors.....	\$ 947.50	
Due from county societies.....	91.80	
For medical histories.....	86.40	
	1,125.70	
	\$ 1,213.20	
Less allowance for doubtful.....	650.00	
Inventory		563.20
"Medical History of Michigan".....		1,558.29
Securities		
Stocks and bonds—at cost.....	\$41,518.75	
Less allowance to reduce to quoted market values.....	16,734.75	
	\$24,784.00	
Uncashed matured coupons on bonds not in default.....	125.00	
		24,909.00
		<u>\$33,974.39</u>
Liabilities		
Accounts payable		
For current expenses, etc.....	\$ 418.01	
Advances for reprints and advertising.....	267.72	
		\$ 685.73
Liability for Funds Administered		
Couzens' Foundation.....	\$ 39.37	
Joint Committee on Public Health Education.....	998.94	
		1,038.31
Unearned Income		
Dues for the year 1936		1,270.00
Reserve		
For Medico-Legal Defense Fund.....		15,413.24
Net Worth		
Balance, at December 25, 1934.....	\$12,207.91	
Net gain for the year ended December 28, 1935.....	722.95	
Reduction in allowance to reduce bonds to quoted market values.....	2,636.25	
		15,567.11
		<u>\$33,974.39</u>

This balance sheet is subject to the comments in this report.

INCOME AND EXPENSE MICHIGAN STATE MEDICAL SOCIETY

	FISCAL YEAR ENDED Dec. 28, 1935	Dec. 24, 1934	INCREASE* DECREASE†
Income			
Membership fees	\$19,528.29	\$20,010.85	\$ 482.56
Journal subscriptions	5,477.09	5,172.22	304.87
Advertising sales	8,051.31	7,037.00	1,014.31
Reprint sales	1,687.75	1,689.15	1.40
Interest received	932.89	1,146.33	213.44
Journal cuts sold.....	279.46	247.94	31.52
Miscellaneous income	30.30	17.66	12.64
	\$35,987.09	\$35,321.15	\$ 665.94
Expenses (As Shown by Exhibit)			
Administrative and general office.....	\$10,001.68	\$ 8,775.14	\$ 1,226.54
Society activities	4,541.34	4,114.71	426.63
Committee expenses	6,194.58	3,568.38	2,626.20
Journal expenses	14,383.24	12,706.64	1,676.60
	\$35,120.84	\$29,164.87	\$ 5,955.97
Other Deduction			
Bad accounts charged off and provided for or compromised in settlement thereof..	143.30	238.50	95.20
	\$35,264.14	\$29,403.37	\$ 5,860.77
NET INCOME	\$ 722.95	\$ 5,917.78	\$ 5,194.83

EXPENSES MICHIGAN STATE MEDICAL SOCIETY

	FISCAL YEAR ENDED Dec. 28, 1935	Dec. 24, 1934	INCREASE DECREASE
Administrative and General			
Secretary's salary	\$ 4,000.00	\$ 4,166.00	\$ 166.00
Executive secretary's salary.....	1,000.00		1,000.00
Other office salaries.....	2,506.50	1,723.00	783.50
Office rent	740.00	1,200.00	460.00
Printing, stationery and supplies.....	668.55	409.77	258.78
Postage	231.25	250.00	18.75
Auditing	246.38	181.10	65.28
Insurance and fidelity bonds.....	74.26	136.00	61.74
Interest paid		52.08	52.08
Furniture and equipment purchased.....	143.96	282.52	138.56
Moving and storage expense.....	133.67	85.77	47.90
Telephone and telegraph.....	243.06	202.62	40.44
Unclassified	14.05	86.28	72.23
	\$10,001.68	\$ 8,775.14	\$ 1,226.54

*Increase is shown in light face type.

†Decrease is shown in bold face type.

MID-WINTER MEETING OF COUNCIL

	FISCAL YEAR ENDED Dec. 28, 1935	Dec. 24, 1934	INCREASE DECREASE
Society Activities			
Annual meeting, less income from exhibits.....	\$ 693.00	\$ 21.55	\$ 671.45
Council expenses	1,621.19	1,922.89	301.70
Delegates to American Medical Association.....	485.07	257.60	227.47
Secretaries' conference	443.43	608.40	164.97
Traveling expense	812.20	807.21	4.99
Reporting annual meeting.....	227.01	166.86	60.15
Sundry society expense	259.44	330.20	70.76
	\$ 4,541.34	\$ 4,114.71	\$ 426.63
Committee Expenses			
Legislative committee	\$ 3,543.76	\$ 1,041.55	\$ 2,502.21
Post-Graduate Conference	954.50	1,213.73	259.23
Economics committee	724.23	500.00	224.23
Joint Committee on Public Health Education—donation.....	500.00	500.00	
Maternal welfare committee.....	103.80		103.80
Public relations committee.....	69.60		69.60
Cancer committee	378.85	55.26	323.59
Preventive medicine committee.....	241.35	255.84	14.49
Radio committee	4.00	2.00	2.00
	\$ 6,520.09	\$ 3,568.38	\$ 2,951.71
Less unexpended portion of donation in prior year to economics committee....	325.51		325.51
	\$ 6,194.58	\$ 3,568.38	\$ 2,626.20
Journal Expenses			
Editor's salary	\$ 3,000.00	\$ 2,250.00	\$ 750.00
Editor's expenses		500.00	500.00
Printing	8,525.79	7,316.28	1,209.51
Reprints	1,409.53	1,388.62	20.91
Discount and commission on advertising sales.....	1,297.92	1,101.74	196.18
Postage	150.00	150.00	
	\$14,383.24	\$12,706.64	\$ 1,676.60
TOTAL	<u>\$35,120.84</u>	<u>\$29,164.87</u>	<u>\$ 5,955.97</u>

RECEIPTS AND DISBURSEMENTS—JOINT COMMITTEE ON PUBLIC HEALTH EDUCATION

MICHIGAN STATE MEDICAL SOCIETY

FISCAL YEAR ENDED DECEMBER 28, 1935

Balance Due Joint Committee—December 25, 1934.....		\$ 11.42
Receipts		
The Detroit News—for articles published.....	\$ 999.96	
Contributions:		
Children's Fund of Michigan.....	\$ 1,500.00	
Michigan State Medical Society.....	500.00	
Michigan Dental Society.....	200.00	
Michigan Hospital Association.....	100.00	
Michigan Tuberculosis Society.....	50.00	
Wayne University College of Medicine.....	50.00	
State of Michigan—Department of Health.....	50.00	
Michigan State Nurses Society.....	25.00	
	2,475.00	3,474.96
Disbursements		\$ 3,486.38
Salaries:		
Mabel Kelly	\$ 1,300.00	
Herman Riecker	975.00	
	\$ 2,275.00	
Don E. Lyons.....	82.00	
Miscellaneous	130.44	
		2,487.44
BALANCE DUE JOINT COMMITTEE—December 28, 1935.....		<u>\$ 998.94</u>

MEDICO-LEGAL DEFENSE FUND MICHIGAN STATE MEDICAL SOCIETY FISCAL YEAR ENDED DECEMBER 28, 1935

Balance—December 25, 1935.....		\$11,139.75
Receipts		
Dues from members.....	\$ 5,314.68	
Interest received	455.00	
	\$ 5,769.68	
Expenditures		
Douglas, Barbour, Dusenberg & Purdy—legal services.....	\$ 1,902.55	
William J. Stapleton, Jr.—salary.....	999.96	
Miscellaneous	31.43	
	2,933.94	2,835.74
Reduction in allowance to reduce securities to quoted market value.....		\$13,975.49
		1,437.75
BALANCE—December 28, 1935.....		<u>\$15,413.24</u>
Represented by:		
Bonds owned (at approximate market value).....	\$ 8,777.75	
Balance, included in assets of the general fund.....	6,635.49	
TOTAL	<u>\$15,413.24</u>	

MID-WINTER MEETING OF COUNCIL

RECONCILEMENT OF NET WORTH MICHIGAN STATE MEDICAL SOCIETY DECEMBER 28, 1935

Net Worth—December 28, 1935—as shown by the Society's books.....		\$13,255.93
Additions		
Reduction in allowance to reduce securities to approximate market value.....	\$ 2,636.25	
Adjustment to take into income, as interest received, value of matured uncashed coupons on bonds not in default.....	100.00	
		\$ 2,736.25
Deductions		
Unentered liabilities	\$ 418.01	
Adjustment of prepaid dues	7.00	
Adjustment of bank account.....	.06	
		425.07
		<u>2,311.18</u>
NET WORTH—December 28, 1935—as shown by this report.....		<u>\$15,567.11</u>

THE EDITOR'S REPORT, 1935

IT IS eight years since my appointment as editor of the JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY. This has been an interesting period in my life inasmuch as it has afforded me intimate association with the men in whose hands have been placed the destinies of organized medicine of this state. This period has included two or three of the most prosperous years of medical and surgical practice as well as a veritable "Slough of Despond" from which, let us hope, we are slowly but surely emerging. At the beginning of the period little thought was given by the profession to the social and economic phases of practice. When the doctor feels a reasonable assurance of economic security, he is content to work and to give of his best often without any hope or expectation of remuneration.

Times, however, have changed and this change in attitude has been recorded in the nearly one hundred numbers of this JOURNAL that have come to your desks. An editor can have but little to present in an annual report. Each monthly number of the JOURNAL is his report placed before you in cold type. There have been times when it was necessary to draw in our editorial belt and for financial reasons to curtail the number of pages of the JOURNAL, though we hope there was never any letting down in the quality. The JOURNAL for 1935 contains 812 pages; 108 pages more than 1934 and 127 more than 1933. Probably it is well that the size be not increased. Our editorial endeavor has been to present each month a journal of well selected contents, edited to the best of our ability. You have already observed a variety of features of medical interest indexed for convenient perusal. We have felt that, important as it is to present to our membership papers of the greatest possible merit, it is of equal importance that reading matter be presented in an attractive form. A wholesome and appetizing dinner is even more appealing when presented on an artistically laid out table. The format of the JOURNAL has been as attractive each month as our sense of the fitness of things permitted, and here again the editor is pleased to credit the intelligent coöperation of the printers. The laying out of our literary table has involved many things. The choice of type, headings, arrangement of departments, and, above all, indexing. Proofs in galley form and in page form have been checked and rechecked; as a result, the JOURNAL has been about as clean as it is possible to make it.

Among the special features might be mentioned the Department of the Woman's Auxiliary of the State Medical Society. This brings to the JOURNAL a large number of sympathetic readers and affords physicians' wives a means of intercommunication.

The medico-legal department by Mr. Barbour and his associates presents timely articles from month to month. It is hoped that in the course of a year, most of the legal problems in the minds of our members will be solved. The department "Be Pre-

pared for Your Cancer Patient" will consist of six papers by the cancer committee. It is hoped that those from whom relief is sought will realize the importance of the early apprehension of cancer, and will see that the patient obtains the necessary care without delay. Medical history needs no apology. One cannot know too much of the vicissitudes in the development of the history of his profession.

The custom of referring all copy by the secretary and the executive secretary to the editor makes it possible to avoid duplication.

Regarding the editorials, the writer can say that as much thought and judgment as he is capable of have gone into their composition. Editorial writing demands wide reading if one is to avoid going stale. You are the judges. To get out a journal each month that meets the approval of our members has come to be almost a full time job. The JOURNAL is published by the council. Even when policies are given in broad outline, a great deal must of necessity be left to the editor, particularly in insuring continuity from year to year, for it will be seen that during my tenure of the position eight presidents have come and gone, and three secretaries have served the society during that period.

The editor wishes to thank the publication committee for valuable assistance in the way of passing judgment on editorial matter that involves comment and opinion.

All of which is respectfully submitted,
J. H. DEMPSTER, M.D., *Editor*.

REPORT OF COMMITTEE ON POSTGRADUATE MEDICAL EDUCATION, 1935

MOST of you are familiar with the history of our postgraduate movement in Medicine. About fifty years ago the American profession recognizing the rapid advances of Medicine began the development in certain centers of postgraduate schools. About 1880, the New York Postgraduate School was organized and about the same time a program of postgraduate medicine was instituted at the University of Michigan. The New York Postgraduate School has served a very useful purpose and is still one of the outstanding schools of the country. There are two reasons for this: *First*, it was located in a large clinical center and, *second*, it was organized primarily for this purpose.

In the case of the University of Michigan no one was particularly responsible for the development of the work. Younger men were delegated to teaching positions with the result that after a few years the attendance dwindled and the work was discontinued. About twenty years ago the American Medical Association urged upon the profession the necessity of postgraduate education, and our own State was among the first to undertake its development. This, as some of you will recall, took the form of one and two-day clinics held in the various council districts once a year. This movement proved highly

MID-WINTER MEETING OF COUNCIL

successful, and marked a milestone in our development in this field.

The rapid advances in Medicine over the past twenty years have made it very difficult for the undergraduate schools to give a satisfactorily rounded course in the four years which even forty-five years ago were thought necessary to teach the fundamentals of Medicine. Thus it became necessary to develop a postgraduate program of teaching, not only for the man who was many years removed from college but in order to amplify the equipment of the more recent graduate.

We soon came to realize that the one- or two-day clinics in each councilor district of the State once or, at most, twice a year were not adequately meeting our needs, and it was with this in mind that the Council of this Society some nine years ago called on our medical schools for direction of this work. Both colleges recognized the importance of the request from the Society and the Detroit College of Medicine felt that it could not undertake the obligation but promised coöperation if the University would undertake the obligation. This the University accepted and I was asked to undertake the development of the new work.

As my time was fully occupied with the Department of Internal Medicine, a year and a half went by before we could satisfactorily fill my place in Medicine and devote my time to the new job. Eight years ago, the Council, at my request, appointed a State Committee to coöperate with me.

Changes have been made in the personnel only on account of death or because of new appointments in the Society. The present members are as follows: Drs. Biddle, Ekelund, Davis, Dempster, Jackson, Marshall, Cook and Slemmons, with myself as Chairman. You will note that the Council is represented by its Chairman, Editor and Secretary. Dr. Slemmons represents the State Board of Health, Dr. Biddle and Dr. Davis the Detroit College of Medicine, and Dr. Jackson and Dr. Marshall the profession at large.

The Committee has been called together about once a year to consider programs and policies. I have two suggestions with reference to this Committee:

First, as it is a standing committee and one of great importance, the notice of its membership should be included in the listing of standing committees.

Second, I would suggest that Dr. J. Milton Robb, chairman of the Wayne County Committee on Postgraduate Medicine, which collaborates with the State Committee, should be added, and also Dr. B. R. Corbus, for many years associated with this movement. These additions make this a rather large committee but its size insures an added interest on the part of the Society in this important work.

While on this subject may I state that the Wayne County Society has designated a permanent committee to work with me on local programs? It is composed of the presidents of the Society, ex officio: Drs. William M. Donald, David S. Brachman, Charles S. Kennedy, James E. Davis, Alexander Blain, and J. Milton Robb, Chairman. At this time I would like to acknowledge the fine coöperation of the Wayne Committee and the tireless efforts of its chairman in making the local program the success that it has been.

As you recall, we added three extension centers in our teaching program last autumn: Bay City; Traverse City, Manistee, Cadillac, jointly, and a center in the Upper Peninsula. In consultation with the Councilors and various members of the Upper Peninsula Medical Society, it was thought best to rotate

a continuous program of three or more days through three or four central locations, rather than a daily program over a number of weeks in widespread centers. Our present planning calls for the first program in Marquette during the latter part of May, and in order to develop a better understanding between all our health agencies, consideration is being given to a composite program. This will include a half to one day in which presentations will be made from Medicine, Public Health, Dentistry, and Nursing, and be succeeded by a break-up in the group for a day or two days conference of the individual units.

During our autumn program we had the following registration:

Battle Creek - Kalamazoo.....	197
Bay City	147
Flint	169
Grand Rapids	234
Traverse City - Cadillac - Manistee.....	75
Total.....	822

This is a gain of approximately 100 over last year.

At this time you might be interested in the growth of our work from its beginning.

In 1928-29.....	47	in attendance
In 1929-30.....	40	
In 1930-31.....	133	
In 1931-32.....	134	
In 1932-33.....	151	
In 1933-34.....	310	
In 1934-35.....	1,245	

The last was the first year of the extension work, the preceding ones being confined to Ann Arbor and Detroit. Of the 1,245 over 700 attended the extension course of 11 days, while 449 attended courses of one week or more in Ann Arbor and Detroit.

May I say in passing without any criticism of the other centers, which all did well, that Bay City had a larger and more constant attendance per population than any of the other centers. Bay City has been fortunate in its Secretary and it has been wise enough to keep him continuously in that position. The efforts of Dr. Urmston and Dr. Foster have succeeded in making a very compact organization.

J. D. BRUCE, M.D., *Chairman*.

REPORT OF THE MEDICO-LEGAL COMMITTEE—1935

THE Secretary of the Medico-Legal Committee hereby submits the annual report for the year 1935. Again it is a pleasure to thank the members of the committee for their coöperation. To the Chairman, Dr. Angus McLean, special thanks are due for his great help and wise counsel. We wish that it were possible to give the members of the Society some idea of the time spent by the Chairman and Secretary in personal interviews with physicians desiring help and information. So much of the work is of a confidential nature that it is thought unwise to publish it.

Thanks are also due Mr. Herbert Barbour, our attorney, and Mr. Clayton Purdy of his office for their great help in carrying on the work of the Committee.

The Secretary wishes to call attention to the series of articles running in the Michigan State Medical JOURNAL on medico-legal topics of interest to the doctor. These articles have been prepared by Mr. Barbour and Mr. Purdy and some by your Secretary. These will be continued as a feature of the

Committee's work. Mr. Barbour's report will be included as part of this report.

The thanks of the Committee are also due to Dr. Herbert Dempster, Editor of our fine JOURNAL, for his coöperation.

Thanks are also due to Dr. B. R. Corbus, our former secretary, for his ready response to all our inquiries.

We also want to say a word of appreciation to Dr. W. C. Woodward, of the Medico-Legal Committee of the American Medical Association, for his service in special matters along the line of this Committee's work.

Again, as in years past, we call attention of the profession to the continued menace of malpractice. No one is immune; for example, one of our young graduates, not a member of the Society, not insured, just trying to get a start, was sued for ten thousand dollars by a charity case. The operation was done at a City Hospital, but the lawyers attached to the City Government threw up their hands at the idea of defending a malpractice suit. We asked why the city could not pay a lawyer. Answer, "We have no funds available." Our Mr. Barbour took the case without a fee and won a nonsuit.

Many of these suits are simply blackmail. "A racket with no justification whatsoever." Nevertheless, doctors must be on their guard always. We will not restate our cautions of previous years. They are a matter of record.

We do suggest that doctors acquaint themselves with their rights and liabilities under the law. We suggest the reading of books such as "Courts and Doctors," a good book on medical jurisprudence, and that classic, "Percival's Medical Ethics." Also the articles in the MICHIGAN STATE MEDICAL JOURNAL and the *Journal of the American Medical Association*. Any physician who is interested can write and we will be glad to send a list of helpful books. The law, like medicine, never stands still; new laws are enacted, new decisions are rendered daily in our Supreme Courts. What was the law yesterday may not be the law today. So we of the Medical Profession should seek to keep abreast of the changes, so that we may know the dangers and thus keep from assuming unnecessary obligations. The Medico-Legal Committee is your source for any information you may desire along this line. Remember, "Ignorance of the law is no excuse."

Herewith is attached a summary of the work for the year 1935:

1. New and threatened cases—38.
2. Cases settled during the year—6.
3. List of some of the questions asked.
4. List of various activities of the Secretary:
 - Talks on Medico-Legal Subjects were given before the Wayne County Medical Society, Kent County Medical Society.
 - First Aid Group at Chevrolet Co., Nurses at St. Joseph's Mercy Hospital, Phi Rho Sigma Medical Fraternity.
 - Course of lectures on Medical Jurisprudence and Ethics at Medical Department of Wayne University.
 - Establishment of course in Medical Economics in Medical Department of Wayne University.
 - Lectures by Mr. William J. Burns.
 - Special Lectures on Medical Jurisprudence at Wayne University by Messrs. Barbour, Purdy and Brown.
 - Establishment of courses in Economics and Sociology as part of the work of Pre-Medic students in Wayne University.

Respectfully submitted,
WILLIAM J. STAPLETON, JR., M.D.
Secretary.

IMPORTANT DECISIONS

Reports of Councilors. Among the reports was presented a problem which recently arose in Macomb County; this was fully discussed. Motion of Drs. Heavenrich-McIntyre: With regard to the proposed contract between twelve physicians of Mt. Clemens and the local Board of Supervisors—any contract entered into for providing medical and surgical care to indigent children or adults shall be made by a county medical society and not by any individual or group. Motion carried unanimously.

Medical Care of Afflicted-Crippled Children.—The Council was given a résumé of activities of the Executive Committee of the Council which for the past three months has been working hard for the revival of Schedules A, B, C, and D. A map showing the integration of the "filter system" in seventy-nine of the eighty-three counties of the State was shown. A committee was appointed to draw up recommendations for presentation at the Second Session of The Council, this date, for adoption by The Council and reference to the Michigan Crippled Children Commission. The Committee: Drs. Penberthy, Baker, Cummings, McIntyre, and Moore.

Joint Committee on Public Health Education.—Dr. J. D. Bruce outlined the progress of the Joint Committee and its plans for the future. A field secretary, recently appointed, is doing excellent work and stimulating concentrated work in districts which require this the most.

Postgraduate Certificates.—From the House of Delegates came the recommendation that rules and regulations be made for granting of certificates of attendance at postgraduate conferences arranged jointly by the Michigan State Medical Society and the Postgraduate Department of the University of Michigan. Motion of Dr. Cummings, seconded by several, that the Advisory Committee on Postgraduate Medical Education be requested to draw up recommendations for such rules and regulations as are required for the granting of certificates of attendance, and degrees of proficiency, such recommendations to be approved by the Executive Committee of The Council. Carried unanimously.

Scientific Exhibits Committee Appointed.—The Executive Secretary reported on the progress of the Section Officers in arrang-

ing the scientific program for the Annual Meeting of the Michigan State Medical Society in Detroit, scheduled for September, 1936. The recommendation of the Section Officers that a Scientific Exhibits Committee be appointed was approved on motion of Drs. Heavenrich-McIntyre and carried unanimously.

The Council recessed at 5:20 P. M. to convene again at 8:15 P. M.

SECOND SESSION OF THE COUNCIL

At the Second Session of January 15, the following matters among others were considered: Annual Report of the Treasurer, Attorney Barbour's report on the right of osteopaths to practice medicine, report of the Medical Economics Committee, resolution to the Michigan Crippled Children Commission, emeritus membership for four physicians, and the Five-Year Program of the Michigan State Medical Society.

The Council convened in Second Session in the Statler Hotel at 8:15 P. M. January 15, 1936. Surgeon General Reynolds of the United States Army was introduced and gave an interesting talk about the Medical Reserve Corps, the advantages of a medical ROTC, and the necessity for a larger Medical-Dental Corps in the Army. Colonel Angus McLean and Colonel Penberthy urged The Council to uphold the recommendations of the Surgeon General and thus uphold the Nation. A Special Committee (Drs. Reeder, Carstens, Penberthy) was appointed to draw up resolutions, and recommended the following:

1. The Michigan State Medical Society notes that there has been a large increase in the enlisted force of the Regular Army with no proportionate increase in the Medical and Dental Corps. It is urgently requested that full consideration be given to the need for the proper number of medical and dental officers, for the purpose of maintaining the health standards of the Army.

2. The Society also notes that recent Appropriation Acts for the support of the Army have resulted in the abolition of the Medical Department R.O.T.C. Units which had been established in a number of Class A medical schools of this country and from which graduates had been commissioned in the Medical Reserve Corps, thereby furnishing a large proportion of the yearly increment required in the Reserve Corps. This method of training medical students and thereby providing Medical Reserve Officers has met with the unqualified approval of the medical profession and continuance is necessary for this purpose and to establish and maintain the proper contact between the Medical Service of the Army and the educational centers of this country.

It is urged that the prohibition relative to the Medical Department R.O.T.C. Units heretofore contained in the Appropriation Acts be omitted in the pending legislation.

Motion of Drs. Reeder-Carstens that this Committee report be adopted, and that the Secretary be directed to mail a copy of the

above resolution as approved to each member of both Houses of Congress in Washington, D. C., and to Surgeon General Reynolds. Carried unanimously.

Right of Osteopaths to Practice Medicine.—Mr. Herbert V. Barbour, Attorney for the Medico-Legal Committee, reported that he had made an exhaustive research on the question of the right of osteopaths to practice medicine and surgery. He read digest of the laws and his opinion in the matter. Full discussion ensued. The brief was filed for future consideration. County medical societies are to be contacted regarding this matter. The suggestion that a brochure be printed telling the membership what the laws of Michigan are re the practice of medicine, osteopathy, etc., was referred to the Publications Committee with authority to comply with this request, on motion of Drs. Powers-Reeder, and carried unanimously.

Medical Economics Committee Report.—Progress on the survey of the cost of the afflicted-crippled child laws' administration, being conducted by the Subcommittee on Medical Relief, was reported to The Council. The other activities of the Medical Economics Committee were presented, and the report was placed on file.

TREASURER'S ANNUAL REPORT FOR 1935

I HAVE the honor to present to the members of the Michigan State Medical Society my report as Treasurer for the year 1935.

As required by the by-laws of the Society, the usual indemnity bond was filed with the State Secretary.

The following bonds are now in my holding:

GENERAL FUND BONDS

American Telephone & Telegraph Company..5%	\$2,000.00
Associated Gas & Electric Company.....4	2,000.00
Community Power & Light Company.....5	2,000.00
Grand Rapids Affiliated Corporation.....5	6,000.00
Herald Square Building Company.....6	2,000.00
Lower Broadway Properties, Inc.....6	2,000.00
National Electric Power Company.....5	5,000.00
New England Gas & Electric Company.....5	1,000.00
Pennsylvania Railroad Company.....5	3,000.00
Peoples Light & Power Corporation.....5½	1,000.00
United Light & Power Company.....5½	2,000.00

MEDICO-LEGAL DEFENSE FUND BONDS

American Telephone & Telegraph Company..5%	\$2,000.00
Grand Rapids Affiliated Corporation.....5	1,000.00
International Telephone & Telegraph Company.....5	2,000.00
New England Gas & Electric Company.....5	1,000.00
New York Central Railroad Company.....4	2,000.00
Peoples Light & Power Corporation.....5½	1,000.00
Public Gas & Coke Company.....3	3,000.00

STOCK

National Gas and Electric Corp.—common—	
96 shares	\$ 960.00

Respectfully submitted,

WM. A. HYLAND, M.D., *Treasurer.*

Treasurer Hyland presented his report on the financial condition of the Michigan

State Medical Society, and on the status of the bonds. The Treasurer's recommendation that the Herald Square Bonds be exchanged for the new issue at 3 per cent with a longer maturity date, was accepted, and on motion of Drs. Carstens-McIntyre the Treasurer was authorized to complete this transaction.

SCHEDULES A, B, C, D

Medical Care of Afflicted-Crippled Children.—The Special Committee (Drs. Penberthy, Baker, Cummings, McIntyre, and Moore) appointed at the First Session to draw up recommendations relative to revival of Schedules A, B, C, and D, presented the following resolution, which was adopted and approved by The Council:

Resolution on Afflicted-Crippled Child Acts

The care of the afflicted and crippled child is the responsibility of the State and not of any group in the State.

The responsibility for a high quality of medical care is the responsibility of the medical profession.

The physicians of the state have been allowed but one dollar per case since July 1, 1935, regardless of the amount or kind of service involved. This is considered manifestly unfair.

The Michigan State Medical Society has set up in each county a filter system for the purpose of prevention of unnecessary expense to the State. (A sample plan now in operation in one county is attached.) This should save the State a considerable sum of money while at the same time it will keep the standard of medical care at a high level.

Therefore, be it resolved that the medical profession of the State of Michigan urgently request the Crippled Children Commission to reinstate immediately Schedules A, B, C, D, and a minimum remuneration for medical services rendered under these acts, payment to be deferred if necessary.

Three matters referred by the Crippled Children Commission to the Michigan State Medical Society for its advice were given to this Special Committee for discussion with the Commission at its meeting of January 16, 1936.

Emeritus Membership.—Applications were presented for Drs. A. N. Collins, Angus McLean, A. Thuner of Wayne County and Dr. J. W. Hauxhurst of Bay County. Motion of Drs. Boys-McIntyre that the names of these physicians be nominated by The Council for recommendation to the House of Delegates for Emeritus Membership in the Michigan State Medical Society. Carried unanimously.

THE FIVE-YEAR PROGRAM

The Five-Year Program of the Michigan State Medical Society was presented by President Penberthy, and met the applause

of The Council. The following is a brief digest:

1. High standard of practice with the continued drive to stimulate postgraduate education.
2. Need for the proper selection of officers, county and state and delegates to annual meeting.
3. Efficient organization for each County Society—executive committee.
4. Support to all committee activities by the members of the Society.
5. Education of the public, contacting people publicly minded, influential citizens and continue to take an active part in the public activities of the community. Medical information bureau in all County Societies.
6. Socialization of medicine—spread knowledge as to what it means and the resulting consequences. Printed material available upon request at the secretary's office.
7. Legislation—professional qualifications act and need for a change in the medical practice act. Laws governing care of the afflicted indigent. Laws giving physicians lien priority. A law to combat corporate practice of medicine.
8. Develop a working plan in the various counties or units for post-payment rather than prepayment plan in sickness insurance.
9. Need for promoting good feeling and coöperation with one another. United front in matters pertaining to medicine.
10. Always have in mind the need for demonstrating honesty of purpose in medical activities, this combined with average intelligence and willingness to work should provide security and create no fear in the mind of the profession as regards the future.

The Council recessed at 11:57 P. M. to reconvene at 10:00 A. M. on January 16, 1936.

THIRD SESSION OF THE COUNCIL

At the Third Session, called to order by Dr. Henry Cook, Chairman, at 10:00 A. M. on January 16, 1936, the minutes of the First and Second Sessions were read and approved. The following matters, among others, were considered: Report of the Publications Committee, Report of the Committee on County Societies, Report of the Finance Committee, Budget for 1936, Report that Schedules A, B, C, and D will be revived as of July 1, 1936, Brochure on Sickness Insurance authorized, Election of the Secretary, Treasurer, Editor, and appointment of an executive secretary, Election of Medico-Legal Committee, Decision on headquarters for 1936 Annual Meeting.

REPORT OF PUBLICATION COMMITTEE

IT IS our pleasure to present the report of the Publication Committee. We think you will agree with us that the publication of the JOURNAL is one of the most important activities of the Michigan State Medical Society. It preserves in permanent form the best medical papers written in this state or by guest speakers at our annual and county society meetings. It is a medium through which the council and the executive committee may address the membership at large.

Its high literary quality as well as typographical appearance has been a matter of favorable comment far and wide. We believe every member of the council is thoroughly satisfied with the JOURNAL.

MID-WINTER MEETING OF COUNCIL

You have heard the editor's annual report. He has enumerated some of the special features which I need not repeat. He has, however, referred to the enlarged space given to the state and county woman's auxiliaries. We believe this is commendable. Nothing but good can come of the intelligent interest doctors' wives are taking in medical affairs. It means, in many instances, the JOURNAL goes into the home rather than the office and is read by both husband and wife.

There are some matters that must have our attention, particularly in regard to raising revenue. In the past the Council has annually allocated \$1.50 of the membership dues for support or subscription to the JOURNAL. We believe every member of the society will admit that he is receiving good value for his money. This, however, does not cover the cost of printing or the editor's salary. The remainder must be made up from advertising. It is possible to increase the number of the advertising pages, but the aim of your committee has been to encourage the same discrimination in the admission of advertising matter as it has reading matter. A first class journal from cover to cover marks the dignity and high standards of the membership that supports it. Your committee would favor non-medical advertising matter as automobiles (every doctor owns one or two cars), high grade tailors, business houses, etc. A concerted effort to patronize advertisers would have a wholesome influence.

THE JOURNAL—JANUARY 1, 1935, TO DECEMBER 31, 1935.

Income:	
Advertising Sales.....	\$ 8,051.31
Journal Cuts	279.46
Reprint Sales	1,687.75
	\$10,018.52
Subscriptions to JOURNAL at \$1.50 per member as determined by the council.	5,478.59
	\$15,497.11
Expense:	
Editorial Expense	\$ 3,000.00
JOURNAL Expense	8,525.79
Commissions	1,297.92
Reprint Expense	1,409.53
	\$14,233.24
Income	\$15,497.11
Expense	\$14,233.24
Profit—Including income from all sources.....	\$ 1,263.87

Now, if we compare the strictly business income (advertising, reprint sales, cuts, etc.) with the strictly business expense (printing of the JOURNAL) we find that we have a deficit of \$1,214.72. The question then arises: How can this deficit be overcome? Could it not be done by increasing our advertising? We believe it can and that it should be one of the duties of the council, the publication committee and the executive office (the latter of which has already gotten off to a good start) to see that this is accomplished in 1936. We could then devote the entire subscription income, at whatever rate per member the council might see fit to designate, to the editorial expense of the JOURNAL.

It might be possible to increase our non-society member subscribers by decreasing the subscription rate (which is now five dollars) to that class of individuals, and thus increase our income from that source.

The question now is: How can we increase our JOURNAL advertising? In our formal report we referred to non-medical advertising matter—as automobiles, business houses, etc. Your committee would like an expression from the council on the above question.

The policy as understood by your publication committee, and carried into effect by the editor, is the good of the physician in private practice. The

aim has been to conserve his interests so far as it is possible to do so by means of a professional journal. With this in view, as you have already been told, the best scientific papers have appeared and will appear. The editorial policy has been towards the unification of the profession in its own interest with emphasis on the importance of the county medical society as the basic unit in organized medicine. The Department of Society Activity has kept the membership informed in regard to our efforts as a council and executive committee to serve its interests. The General News section, adopting the slogan of an eastern daily, has endeavored to include all the news that's fit to print. This may be modified to include all the medical news that has a statewide appeal.

We look for the help of the executive secretary in his rôle as business manager of the JOURNAL, and with the coöperation of the membership in the matter of patronizing advertisers, the future of the JOURNAL should be assured.

All of which is submitted,

H. S. CUMMINGS, M.D.
J. E. MCINTYRE, M.D.
A. S. BRUNK, M.D.
Publication Committee.

The Committee's report was approved, on motion of Drs. Powers-Heavenrich, and carried unanimously.

REPORT OF COMMITTEE ON COUNTY SOCIETIES

THE committee expresses to Dr. W. J. Stapleton, chairman of the Medico-Legal Committee, appreciation for his careful analysis of the threatened and active cases of alleged malpractice. We appreciate that much of this work cannot be made public, but, nevertheless, requires a large amount of time on the part of Dr. Stapleton and his committee.

We wish to re-emphasize Dr. Stapleton's admonition toward alertness on the part of the profession in guarding against possible suits for malpractice. The committee also wishes to stress the point made by Dr. Stapleton against the discontinuance of the defense aspect of the state society because the society will be responsible up to 23 years from date of such discontinuance in certain cases, and that insurance rates are kept lower by state defense.

In reviewing the cases of alleged malpractice as reported by Mr. Barbour it is our judgment that the medical defense is being well handled.

The secretary's report impresses this committee as exhibiting on his part careful thought and studious effort in the conduct of the duties of his office. We recommend the adoption of his report in full.

B. H. VAN LEUVEN, M.D.
V. N. MOORE, M.D.
C. E. BOYS, M.D., *Chairman*.

This Committee report was approved, on motion of Drs. Boys-Heavenrich, and carried unanimously.

REPORT OF FINANCE COMMITTEE, 1935

The Finance Committee reported through its chairman, Dr. Carstens, who discussed the financial report for 1935 in full detail, and also presented recommendations for the

JOUR. M.S.M.S.

Budget for 1936. Dr. Bandy spoke about financial help to erect the tablet to Dr. Harrison at Sault Ste. Marie, and on motion of Drs. Bandy-Boys, a committee was appointed to coöperate with the Chippewa County Medical Society in this matter, with power to expend funds in an amount not to exceed \$100. Committee: Drs. Perry and Manthei.

SOCIETY BUDGET FOR 1936

Income:	
3,600 members at \$10.....	\$36,000.00
Interest	1,000.00
	<hr/> \$37,000.00
Appropriations:	
Defense Fund (3,600 members at 50c)...	\$ 1,800.00
Journal Subscriptions (3,600 at \$1.50)...	5,400.00
Rent and Electricity.....	760.00
Annual Meeting.....	350.00
Post Graduate Activities.....	1,200.00
Committee Expense:	
Cancer Committee	\$300.00
Preventive Medicine Committee	300.00
Medical Economics Committee	500.00
Joint Committee on Pub. Health Educ.....	500.00
Legislative Committee.....	500.00
Special Committees.....	750.00
	<hr/> 2,850.00
Committee Reserve	1,500.00
Council Expense	1,800.00
Postage	750.00
Printing, Stationery, and Supplies.....	900.00
Delegates to A. M. A.	600.00
Stenographic	2,600.00
Society Expense	2,000.00
Miscellaneous General Expense.....	1,500.00
Publications Expense	590.00
Secretaries' Conference	600.00
Secretary's Salary	2,500.00
Executive Secretary Salary.....	6,000.00
Contingent Fund	1,500.00
Reserve	1,800.00
	<hr/> \$37,000.00

BUDGET OF THE JOURNAL, 1936

Income:	
Advertising (net)	\$ 7,000.00
Subscriptions	5,400.00
Reprint Profit	150.00
	<hr/> \$12,550.00
Expenses:	
Printing	\$ 8,600.00
Editor's Salary	3,000.00
Secretarial Expense	600.00
Postage	200.00
Reserve	150.00
	<hr/> \$12,550.00

Each item of the Society Budget and of the JOURNAL Budget was discussed individually. After full consideration, motion was made by Drs. Carstens-Cummings that the budgets as presented be adopted and approved. Carried unanimously.

**The Council Recessed for Luncheon
From 12:15 P. M. to 1:15 P. M.**

Medical Care of Afflicted-Crippled Children.—The Special Committee appointed to meet with the Crippled Children Commission reported on four matters which they discussed with the Commission: approval of an Alma Hospital; two problems of ethics, and the resolution of the Crippled Children Commission reviving Schedules A, B, C, and D as of July 1, 1936. The resolution follows:

**Resolution On Afflicted-Crippled Child Acts
Adopted January 16, 1936**

BE IT RESOLVED by the Michigan Crippled Children Commission in regular meeting assembled this 16th day of January, A. D. 1936, that

Since it appears certain that the appropriation made for "Medical Care of Children" by the 1935 legislature will have been completely expended or encumbered on or before April 1, 1936, and

Since every legitimate effort has been made by this Commission and other organizations interested in proper medical service to needy afflicted and crippled children to obtain additional funds for this purpose from the Augmented State Administrative Board without success to this date, and

Since this Commission understands that the fiscal agents of the present State Administration feel that they must strictly enforce the law in respect to departments of the State Government overdrawing appropriated funds and creating deficits, now

Therefore, the Michigan Crippled Children Commission continue the present temporary fee schedules "A," "B," "C," and "D" relating respectively to afflicted and crippled children until March 31, 1936, and that on April 1, 1936, the fee schedules "B" and "D" relating respectively to hospital treatment of afflicted and crippled children also be reduced to one dollar (\$1.00) per patient regardless of the number of days such patient remains in the hospital or the type of treatment he may require. Provided, that actual and necessary appliances may be charged to the State at actual cost. These fee schedules shall be in effect from April 1, 1936, until additional funds shall have been made available sufficiently to warrant another change or until June 30, 1936. On July 1, 1936, the beginning of the second year of the legislative biennium, the flat rate hospital fees of \$3.25 and \$4.00 per day respectively shall again become effective and charges may be made to the State at the published fee schedules "A" and "C" relating to physicians' services.

The Committee's report was accepted by The Council and ordered placed on file.

**FACTS ON SOCIALIZATION OF
MEDICINE**

Brochure on Sickness Insurance.—Secretary Ekelund presented the problem of debates on socialization of medicine in high schools and colleges being conducted in almost all the states; that this topic, although officially not the designated subject in Michigan, was being debated in certain sections of this State. He presented the recommendation of the Public Relations Committee on the need of a brochure to send to physicians, giving them arguments to use against this socialization of medicine propaganda, and read extracts from his proposed booklet, which met the applause of The Council. General discussion. The Chair called upon Dr. J. M. Robb, who thanked The Council for appointing him to the Advisory Committee on Postgraduate Education; and also stated that he felt organized medicine has gained in its work against the socialization of medicine, that Dr. Ekelund's divisions were perfectly clear and that his brochure

has most of the things that should be commended to the profession. Further discussion brought out the necessity for a medical coördinator of relief medicine in Lansing, and included the questionnaire being circulated by the American Foundation Studies in Government.

Motion of Drs. Brunk-Cummings that The Council approve the work done on the brochure so far and instruct the Secretary and Executive Secretary to work on this towards its completion, and to refer same to the Executive Committee of The Council with power to act. Carried unanimously.

Correspondence from County Medical Societies, and miscellaneous items relative to committee expense, surety bonds, transfer of bonds in the various accounts, workmen's compensation coverage on employes, etc., were presented to The Council and appropriate action taken on each matter.

ELECTIONS

Election of Medical Secretary.—Dr. C. T. Ekelund of Pontiac was elected as Secretary of the Michigan State Medical Society on motion of Drs. Cummings-Reeder. Carried unanimously.

Election of Treasurer.—Dr. Wm. A. Hyland of Grand Rapids was elected Treasurer of the Michigan State Medical Society on motion of Drs. Moore-Heavenrich. Carried unanimously.

Election of Editor.—Dr. James H. Dempster of Detroit was elected as Editor of THE JOURNAL of the Michigan State Medical Society on motion of Drs. Carstens-Moore. Carried unanimously. Motion of Drs. Cummings-Perry that the budget of THE JOURNAL include six hundred dollars for secretarial expense in the Editor's office, and one

hundred fifty dollars for the reserve fund, was carried unanimously.

Election of Medico-Legal Committee.—Drs. Angus McLean, Wm. J. Stapleton, Jr., E. I. Carr, F. B. Miner, and Wm. R. Torgerson were elected to the Executive Board of the Medico-Legal Committee, on nomination of Dr. Reeder, supported by several. Dr. McLean was elected as chairman on nomination of Dr. Heavenrich, supported by several. The Committee elects its own secretary.

Appointment of Executive Secretary.—Wm. J. Burns, LL.B., was appointed as Executive Secretary of the Michigan State Medical Society, on motion of Drs. Urnston-Brunk. Carried unanimously.

Headquarters for 1936 Annual Meeting.—Dr. Penberthy, as Chairman of the Special Committee to investigate suitable headquarters in Detroit, reported on the invitations received from four hotels and convention offices offering accommodations. Floor plans were presented and studied by The Council. After full discussion, motion was made by Drs. Brunk-Manthei that the Book-Cadillac Hotel be selected as the headquarters for the 1936 Annual Meeting. Carried unanimously.

Adjournment.—The Chair thanked all the Councilors for their effort in coming distances to attend this meeting, for their generosity in contributing two and in some cases three full days to the Michigan State Medical Society, and for their hard work and serious deliberation of the affairs and problems of the association. The meeting was adjourned at 4:30 P. M. on January 16, 1936.

Infant Feeding: Historical Background And Modern Practice

Grover F. Powers, New Haven, Conn. (*Journal A.M.A.*, Sept. 7, 1935), gives a historical summary of the practice of infant feeding and discusses the formulation of the infant's diet in modern practice, the rules for devising milk formulas, infant mortality and the psychologic era. He believes that, while the importance of an understanding of the emotional aspect of the feeding of infants is too little appreciated and that the chief problem at present arises in this domain, no real achievement in the newer knowledge of nutrition is thereby ignored. The most important aspect of the emotional problem in infant feeding is recognition that the problem exists and to a large degree may be prevented if the physician has insight and understanding of the personality of the

mother and takes pains to prepare her to meet situations that are bound to occur in every case. The physician may need the assistance of a psychologist or a psychiatrist or both in therapy, but the burden of prevention is wholly that of the physician who guides the feeding. Here, if anywhere, "an ounce of prevention is worth a pound of cure." But prevention means understanding, insight, tact and patience. The physician must have all these qualities, and he must devote a great deal of time to the handling of these cases. Dr. Marian Putnam states that her most serious cases are those in which a tactless, brusque physician has scolded or otherwise occasioned resentment or feelings of guilt and inadequacy on the part of the mother. "Never show irritation at an unreasonable mother" is always a safe rule for the physician to follow.

DEPARTMENT OF SOCIETY ACTIVITY

C. T. EKELUND, M.D., Secretary

UNIVERSITY OF MICHIGAN MEDICAL SCHOOL

and

THE MICHIGAN STATE MEDICAL SOCIETY

Progressive Five-Year Program of Postgraduate Study
1936 Schedule

Short, Intensive Courses to be given in the spring of 1936

Detroit Center

Proctology.
Gynecology, Obstetrics and Gynecological Pathology.
General Practitioners' Course.
Genito-Urinary Surgery.
Pediatrics.

Ann Arbor Center

Electrocardiographic Diagnosis.
Diseases of Metabolism.
Ophthalmology and Otolaryngology.
Roentgenology.
Laboratory Technic.
Medical Military Refresher Course.

Upper Peninsula Centers

The Upper Peninsula program will be given the latter part of May.

The annual fall extension courses will begin in September. The program will be announced later for the following centers:

Grand Rapids

Flint

Battle Creek-Kalamazoo, jointly

Bay City

Manistee-Traverse City-Cadillac, jointly

Upper Peninsula

For dates of courses and other information, address:

Department of Postgraduate Medicine

University Hospital

Ann Arbor, Michigan

THE COUNCIL CHAIRMAN'S COMMUNICATION

DR. Henry Cook, Chairman of The Council, sends the following message to county medical societies:

"In contacts with Governmental Agencies and Allied Groups, the officers and committeemen of the Michigan State Medical Society are forced to recognize that the solution of most problems is possible only by the county medical society. Let us take, for example, the problem of supplemental medical relief for WPA clients. No one will disagree but that the so-called security wage given these people is insufficient for unusual expenditures, such as for a major operation in a hospital. When an extraordinary accident of this nature occurs, it is necessary that the client be aided by some agency or group. The Federal Government does not recognize this responsibility; private philanthropy is overtaxed; the state and county governments are faced with supplying such supplemental relief. Meetings with the Michigan State Emergency Relief Administrator in Lansing bring out the fact that some type of supplemental relief is being given to WPA clients in a number of counties in Michigan, in various ways. The matter of inserting a definite item for supplemental relief in the monthly budget of the county ERA is entirely in the hands of the local authorities—subject to approval by the State ERA. This approval usually is given.

"It remains, therefore, for the county medical society to contact officials of the county ERA relative to supplemental medical care for WPA employees. Regarding all other medical problems touching government, the same procedure must be followed. The Michigan State Medical Society is anxious and willing to help, but in most cases the instrumentalities must be invoked first by the county society. We urge officers of the county medical societies to present their problems to their judges of probate, boards of supervisors, county poor commissioners, and all others who have something to do with the provision of medical care for relief clients and those on the border line. A solution of most of these problems will result from a friendly understanding of the physician's viewpoint by governmental officials, and at the same time a knowledge by the physician of the scope and authority of the office holder. Fair dealing, in the interest of the patient, will always result in success for the work of the medical society, and its individual member."

POSTGRADUATE EDUCATION

THE fourth annual Medical Military Refresher Course for Reserve Medical and Dental officers of the Army, Navy and National Guard is announced by the Department of Postgraduate Medicine, University of Michigan, for April 12 to 25, inclusive.

By arrangement between the University, the Commanding General, Sixth Corps Area, U. S. Army, and the Commandant of the Ninth Naval District, U. S. Navy, reserve officers of these services, residing in Michigan, Illinois and Wisconsin, upon application to their respective commanders may obtain orders to attend this inactive

duty school. An invitation has been extended to the Commanding General, Fifth Corps Area, for the officers in Ohio, Indiana, Kentucky and West Virginia.

The morning hours during the two weeks will be occupied in ward walks, observation of surgical operations, clinical conferences and demonstrations in the fields of Internal Medicine, General Surgery, and Oral and Dental Surgery. Medical officers will be required to elect either Internal Medicine or Surgery as their clinical field of study in Medical School and University Hospital. The dental officers will follow a course arranged by the School of Dentistry and the section on Oral Surgery at the University Hospital.

The afternoon and evening periods will include lectures and demonstrations on clinical subjects pertinent to civilian practice but also of military importance, military information of value to medical and dental officers, and other general discussions by members of the faculties of the University, and officers in the reserve and regular service of the Army and Navy.

Quarters will be available in the Michigan Union, the men's club at the University.

Inquiries should be directed through military channels.

SOCIAL SERVICE PLEASE NOTE

FOR at least twenty years social service and the profession of medicine have attempted by coöperative endeavor to provide medical care to indigents and people of small means. This liaison has not always been one of complete understanding. From time to time controversies have arisen, the result of divergent viewpoints on local and national issues, yet each profession is partly dependent upon the other in playing its part in the daily routine of human affairs.

In a limited sense social service itself has nothing to offer; it dispenses the substance and the services of others. It functions almost wholly as a distributing agency. Medical men have frequently been antipathetic toward the social service technique, holding that it was not sufficiently selective and exclusive in distributing medical service. Social service has sometimes assumed that it alone is best qualified to determine the amounts and kinds of medical service to be distributed without regard to

the point of view of the profession actually rendering the service.

The technique of social service is intrinsic in the operations of many governmental agencies; of Public Health nurses, of county supervisors, of political appointees in city and county government, of hospital administrators, of probate judges, of state and county relief and welfare agents, many of whom hold office through political affiliation. Trained social service personnel will be quick to agree that social service technique as practiced by these untrained gentry leaves much to be desired and in large measure is responsible for the open distrust with which the profession of medicine regards social service in its entirety.

Existing mechanisms for distributing medical service to indigents and to people of small means are seldom given the benefit of sound coöperative administration by social service and the medical profession. Result: a disappointed medical profession and a belligerent administration ready to accuse it of bad faith. Social service leaders have been well aware of the widespread breakdown of such coöperative attempts and prescribe entirely new devices and plans as the only effective remedy. They have never given sufficient thought to the *reason* for such breakdown.

It has been contended that medical care may be made available to indigents and to people of *relative* indigency through the operation of existing agencies. A great deal of force is given to this contention by factual data available in certain areas in Michigan. Successful administration in these areas differs from other and unsuccessful administrations in only one particular, namely, in the quality, the training and intelligence of the administration.

Rather than to advocate health insurance and state medicine, Social Service would do well to discover for itself the potentialities of existing agencies.

SCHEDULES A-B-C-D Effective July 1, 1936

THE Council of the Michigan State Medical Society, at its mid-winter meeting of January 15 and 16, 1936, adopted the following Resolution prepared by its Special

Committee (Dr. G. C. Penberthy, Chairman, Drs. F. A. Baker, H. H. Cummings, J. E. McIntyre, and V. M. Moore):

"The care of the crippled and afflicted child is the responsibility of the State and not of any group in the State.

"The responsibility for a high quality of medical care is the responsibility of the medical profession.

"The physicians of the State have been allowed but one dollar per case since July 1, 1935, regardless of the amount or kind of service involved. This is considered manifestly unfair.

"The Michigan State Medical Society has set up in each county a filter system for the purpose of prevention of unnecessary expense to the State. This should save the State a considerable sum of money while at the same time it will keep the standard of medical care at a high level.

"THEREFORE, BE IT RESOLVED that the medical profession of the State of Michigan urgently request the Crippled Children Commission to reinstate immediately Schedules A, B, C, and D, as a minimum remuneration for medical services rendered under these acts, payment to be deferred if necessary."

The Special Committee was authorized to confer immediately with the Michigan Crippled Children Commission for a possible solution of this problem. The Commission promulgated the following ruling on January 16, 1936:

Resolution On Afflicted-Crippled Child Acts

"BE IT RESOLVED by the Michigan Crippled Children Commission in regular meeting assembled this 16th day of January, A. D. 1936, that

"Since it appears certain that the appropriation made for 'Medical Care of Children' by the 1935 legislature will have been completely expended or encumbered on or before April 1, 1936, and

"Since every legitimate effort has been made by this Commission and other organizations interested in proper medical service to needy afflicted and crippled children to obtain additional funds for this purpose from the Augmented State Administrative Board without success to this date, and

"Since this Commission understands that the fiscal agents of the present State Administration feel that they must strictly enforce the law in respect to departments of the State Government overdrawing appropriated funds and creating deficits, now

"Therefore, the Michigan Crippled Children Commission continue the present temporary fee schedules 'A,' 'B,' 'C,' and 'D' relating respectively to afflicted and crippled children until March 31, 1936, and that on April 1, 1936, the fee schedules 'B' and 'D' relating respectively to hospital treatment of afflicted and crippled children also be reduced to one dollar (\$1.00) per patient regardless of the number of days such patient remains in the hospital or the type of treatment he may require. Provided, that actual and necessary appliances may be charged to the State at actual cost. These fee schedules shall be in effect from April 1, 1936, until additional funds shall have been made available sufficiently to warrant another change or until June 30, 1936. On July 1, 1936, the beginning of the second year of the legislative biennium, the flat rate hospital fees of \$3.25 and \$4.00 per day respectively shall again become effective and charges may be made to the State at the published fee schedules 'A' and 'C' relating to physicians' services."

COUNCIL AND COMMITTEE MEETINGS

1. *January 8, 1936*—Subcommittee of Public Relations Committee—Probate Court, Flint,—11:00 A. M.
2. *January 8, 1936*—Special Contact Committee with Governmental Agencies and Allied Groups—Wayne County Medical Society Building, Detroit—2:00 P. M.
3. *January 8, 1936*—Subcommittee of Contact Committee with Governmental Agencies—Michigan WPA Administrator's Office, Detroit—3:00 P. M.
4. *January 8, 1936*—Legislative Committee—Wayne County Medical Society Building, Detroit—6:30 P. M.
5. *January 12, 1936*—Maternal Health Committee—Olds Hotel, Lansing—2:00 P. M.
6. *January 15-16, 1936*—Midwinter Meeting of The Council—Statler Hotel, Detroit—Three Sessions.
7. *January 22, 1936*—Subcommittee of Contact Committee with Governmental Agencies—SERA Office, Lansing—10:00 A. M.
8. *January 26, 1936*—Annual Secretaries' Conference—Olds Hotel, Lansing—All Day Session.

COMMITTEE DECISIONS

If a man owns his home, his automobile, a radio, et cetera, is entirely out of debt but is temporarily without a job, is he entitled to free, tax-supported medical care?

This is a question which was presented to the Public Relations Committee on December 22, 1935. How would you have answered it? See how the PRC handled this problem. It is item 5a of the minutes of its December 22, 1935, meeting, published in this issue of THE JOURNAL.

* * *

"To decrease the cost of probating cases under the Afflicted-Crippled Child Laws, it is the sense of the PRC that no commitments be made until the patient has gone through the Economic and Medical Filters; commitment should then be made on probate certificate signed by the family physician, and if no family physician exists, commitment should be made on probate certificate signed by an assigned physician. This activity will reduce the cases and relieve the State of the economic load, and the individual Probate Judge of much unnecessary work in his office."

—From the PRC meeting of December 22, 1935.

* * *

Shall WPA workers, as a group, be offered medical care at reduced rates, equal to 50 per cent of ordinary fees? This was a matter referred by a County Medical Society of Michigan which asked advice from the Governmental Agencies Committee of the Michigan State Medical Society. This Committee answered:

"We advise that each physician deal with each man as his private patient, making such financial arrangement as seems justified. Only in this way will the patient-physician relationship be maintained and work to the advantage of the physician as these workers are absorbed in private industry. It might be to the advantage of the County Medical Society to let the public know about this."

—From Governmental Agencies minutes of meeting of January 8, 1936.

INCOME TAX FOR PHYSICIANS

TIME of Filing: Before March 15.

Time may be extended by District Collector for cause shown.

Penalty for failure to make return may be 25 per cent of tax due.

Normal tax rate 4 per cent.

Physicians must file returns whose gross income amounted to \$5,000; or whose net income amounted to:

- (a) \$1,000 if single or if married and not living with spouse
- (b) \$2,500 if married and living with spouse
- (c) More than personal exemption if status changed.

If combined net income of husband and wife and dependent minor, if any, is \$2,500 or over, or if their combined gross income is \$5,000 or over, all such income must be reported on a joint return, or on separate returns of husband and wife.

Taxpayer is responsible for obtaining blanks.

OF SPECIFIC INTEREST TO PHYSICIANS are the following items:

GROSS INCOME is the total amount received by a physician during the year for professional services, plus profits from investments or speculations, and compensation and profits from other sources.

NET INCOME is gross income less personal exemptions and expenses.

EARNED INCOME up to 10 per cent of net income, but not in excess of \$14,000, may be deducted from net income. \$3,000 of physician's net income from whatever source may be considered earned income.

EXPENSES DEDUCTIBLE FOR PHYSICIAN:

Cost of supplies, such as dressings, drugs, clinical thermometers, etc.

Cost of operating automobile used in making professional calls

Dues to professional societies (but not dues to social clubs)

Rent paid for office rooms

Cost of fuel, light, water, telephone, etc., used in office

Hire of office assistants

Subscriptions to medical journals and books

If the useful life of furniture, instruments and equipment or books is short, amounts currently expended therefor.

Expenses incurred attending medical conventions Insurance premiums paid against professional losses

Expense in defending malpractice suit

Loss and damage to equipment by fire, theft or other cause not compensated by insurance or otherwise recoverable

Laboratory expenses, when under corresponding circumstances they would be deductible if related to physician's office.

Travelling expenses incurred on strictly professional business.

DEPRECIATION AND OBSOLESCENCE:

THE PRINCIPLE governing determination of rates of depreciation is that the total amount claimed as depreciation during the life of the article, plus the salvage value of the article at the end of its useful life, shall not be greater than its purchase price, or fair market value as of March, 1913, if purchased before that date. If it is found the length of life of an article has been estimated erroneously, a new estimate should be made and deduction then made accordingly.

FAIR ESTIMATE OF YEARLY DEPRECIATION on following articles:

Automobiles	25 per cent
Ordinary medical libraries	10 per cent
X-ray Equipment	
Physical Therapy Equipment	
Electrical Sterilizers	
Surgical Instruments	
Diagnostic Apparatus	
Office Furniture	5 per cent

JOUR. M.S.M.S.

POST GRADUATE STUDY not deductible.

AUTOMOBILES: Original cost not deductible.

Expense of operating and depreciation deductible as follows:

Cost of gasoline, oil, tires

Insurance

Repairs

Garage rental (if garage not owned by physician)

Chauffeurs' wages

Estimated depreciation must be spread over entire life of car, not time in owner's possession

If used partly for pleasure or by family, only so much of expense used for professional practice may be deducted

Expense of car used merely to transport physician to and from a limited office practice is not proper for deduction.

SPECTACLES: Sales of spectacles, etc., by oculists may be included as income, and cost of articles sold deducted as expense. Charges for services should be kept separate on physician's books from charges for spectacles, etc.

A somewhat more detailed article on the above subject is to be found in the *Journal of the American Medical Association* for January 11, 1936.

MINUTES OF MEETING OF THE MATERNAL HEALTH COMMITTEE

Lansing, Sunday, November 24, 1935

1. The meeting was called to order in the Olds Hotel, Lansing, at 2:00 P. M. Present—Drs. Alexander M. Campbell, Grand Rapids, chairman; Norman F. Miller, Ann Arbor; Harold W. Wiley, Lansing; Harold Furlong, Pontiac. Absent—Dr. Ward P. Seeley, Detroit.

2. A review of the accomplishments of the Committee of Maternal Health was made and activities for the coming year were discussed.

3. It was planned to have a committee write a letter to the presidents of the County Medical Societies requesting them to appoint for each society a Maternal Health Committee. Dr. Norman Miller stated that he would get up a letter as an example of the type of communication to be sent to the County Medical Society presidents.

Dr. Harold Wiley was asked if he would contact Dr. C. C. Slemmons, State Health Commissioner, to determine if any money could be available to defray the expenses of the stenographic work and other expenses that might be accrued to carry on with this work.

4. The question of publicity was also discussed with the idea of carrying the message of Maternal Health and its improvement to the public by talks before Luncheon Clubs, The Federated Women's Clubs, by Radio and other methods.

5. The problem of better clinical facilities for teaching Obstetrics at the University of Michigan was discussed and considered to be fundamental. Dr. Miller stated that it required at least 500 more obstetrical cases to furnish adequate clinical material for the students at Ann Arbor, and methods were discussed relative to obtaining such cases from Welfare cases throughout the State.

6. The unsatisfactory method of maternal care of women on relief throughout the State was discussed. The Committee took under consideration the advisability of its attacking this unsatisfactory state of affairs but no action was taken.

7. The Committee felt the magnitude and importance and responsibilities and duties devolved upon it and hopes to meet frequently and agreed that Lansing was probably the most central point at which these meetings could be held.

ALEXANDER M. CAMPBELL, M.D.

MINUTES OF MEETING OF THE PUBLIC RELATIONS COMMITTEE

Lansing, Sunday, December 22, 1935

1. *Roll Call.*—The meeting was called to order by Dr. L. F. Foster, Chairman, at 2:40 P. M., in the Hotel Olds, Lansing. Present were Drs. L. F. Foster of Bay City, F. T. Andrews of Kalamazoo, E. I. Carr of Lansing, R. H. Holmes of Muskegon, F. B. Miner of Flint, and A. H. Whittaker of Detroit; also Dr. C. E. Boys, Chairman of Council's Committee on County Societies, and Executive Secretary Wm. J. Burns. Absent were Drs. Philip Riley of Jackson, J. J. Walch of Escanaba, and A. V. Wenger of Grand Rapids (excused).

2. *Minutes.*—The minutes of the meeting of November 13, 1935, were read and approved.

3. *New Members.*—The Chair welcomed the two new members of the Committee, Drs. Andrews and Holmes.

4(a). *Organization Work.*—The Chair called upon the Executive Secretary for a report on the key groups appointed to date in the various county medical societies. This report showed a few loose ends in the State. The Chair stressed the necessity of contacting individual county medical societies.

4(b). In order to contact all county medical societies, the seventeen Councilor Districts were allocated to the various members of the Public Relations Committee, by mutual agreement:

These members will be available to attend county medical society meetings in the allocated districts, in company with the Councilors. In this way, the remaining societies and districts will be covered, and the loose ends will be gathered in. This will integrate the filter system in every county in the State and thus help the State and the public.

5(a) *Afflicted-Crippled Child Acts.*—A question as to whether the filter system should include crippled children resulted in a decision that it was so intended, and the orthopedic men who attended meetings of the Executive Committee of The Council understood this arrangement. Another question referred to commitment of the child of a man who owns his home, his automobile, radio, etc., is out of debt but temporarily without a job: Discussion brought out that the law states the judge "may" send such a case to the hospital for tax supported medical care but the law does not make it mandatory. Motion of Drs. Holmes-Carr that since the definition of indigency is discretionary with the probate judge, this Committee feels a person should not be committed under these two acts if there is a probability of payment to the physician on either a deferred or part payment plan. Carried unanimously.

Discussion resulted in the opinion that the appointing of the Economic Filter is the prerogative of the probate judge, but the county medical society should offer advice to him and concur in the appointment of the Economic Filter, which should be a social service agency in which the medical profession has confidence. Individuals who are interested in rounding up cases should not be on the Economic Filter, which is designed primarily to save the State money by cutting down the cases to those requiring urgent work.

To Cut Costs of Probating.—The Committee discussed the statement that the cost of probating some cases was between \$6 and \$7 per case. Motion of Dr. Miner-Whittaker: To decrease the cost of probating cases under these Acts, it is the sense of this Committee that no commitments be made until the patient has gone through the economic and medical filters; commitment shall then be made on probate certificate signed by the family physician, and if no family physician exists, commitment shall be made

on probate certificate signed by an assigned private physician. Motion carried unanimously.

Motion of Drs. Andrews-Holmes: In the definition of medical filter, there be added to the items of "urgency and necessity" the following: "and to estimate the necessary period of hospitalization and treatment." Motion carried unanimously.

Motion of Drs. Carr-Miner that a communication be addressed to the Probate Judges respectfully suggesting that they urge people to apply for commitments through a private physician. Motion carried unanimously. This activity will reduce the cases, and relieve the State of the economic load, and the individual probate judge of much unnecessary work in his office.

Motion of Drs. Whittaker-Miner that the public relations committee in each county medical society be an advisory committee to the probate judge. Motion carried unanimously.

The definition of the terms "indigent," "urgent," and "necessary" is to be referred to the Crippled Children Commission.

5(b) *Approval of Hospitals.*—The case of Smith Memorial Hospital at Alma was discussed and on motion of Drs. Whittaker-Holmes was presented to the Executive Committee of The Council to refer to the appropriate committee for immediate investigation, as this problem is jeopardizing the filter system in Gratiot County and must be settled at once. Carried unanimously.

6(a). Motion of Drs. Holmes-Whittaker that this Committee recommend that the M. S. M. S. prepare a brochure with arguments against the socialization of medicine and that it be sent to every member of the M. S. M. S.; and that editors of county medical societies' bulletins be urged to reprint the brochure. Carried unanimously.

6(b). *Muskegon County Letter.*—The correspondence relative to WPA medical care was read and discussed. Motion of Drs. Whittaker-Miner that this question be referred to the Executive Committee of The Council with the recommendation that it be sent to the Committee on Governmental Agencies which shall keep in contact with the Muskegon County Medical Society regarding this problem. Carried unanimously. Motion of Drs. Holmes-Carr that the Public Relations Committee advise the Muskegon County Medical Society of the above action with the request that Muskegon County Medical Society please withhold action until notified of the decision of the Committee on Governmental Agencies. Carried unanimously.

7. *Committee References.*—The references from the Legislative Committee and from the Committee on Preventive Medicine were presented. Motion of Drs. Holmes-Andrew that due to the lateness of the hour and the fact that these items are not urgent that they be placed on the agenda of the next meeting of the PRC. Carried unanimously.

8. *Contact with Public.*—Dr. Whittaker presented his verbal outline whereby physicians could effect necessary contact with the public. After discussion, motion of Drs. Holmes-Andrews that Dr. Whittaker be requested to write up his plan in detail so that it may be mimeographed and sent to each member of this Committee, and that it be placed on the agenda of the next meeting of the PRC. Carried unanimously.

9. The meeting was adjourned at 6:05 P. M. The Chair thanked all for their attendance at this Sunday session, and for their advice.

MINUTES OF MEETING OF SPECIAL CONTACT COMMITTEE TO GOVERNMENTAL AGENCIES AND ALLIED GROUPS

Detroit, Wednesday, January 8, 1936

1. *Roll Call.*—The meeting was called to order by Dr. Henry Cook, Chairman, in the Wayne County Medical Society Building at 2:25 P. M. Those present were Dr. Cook of Flint, Dr. B. R. Corbus of Grand Rapids, Dr. L. F. Foster of Bay City, Dr. T. K. Gruber of Eloise, Dr. C. R. Keyport of Grayling, and Dr. R. H. Pino of Detroit. Also present were Secretary C. T. Ekelund of Pontiac and Executive Secretary Wm. J. Burns. Absent were Dr. H. H. Cummings of Ann Arbor; Dr. Grover C. Penberthy of Detroit (excused).

2. *WPA Medical Care.*—The Chair announced that an appointment had been obtained for a meeting with Mr. H. L. Pierson, State WPA Director, at 3:00 P. M. this date, and requested the Committee to discuss certain WPA matters for presentation to Mr. Pierson. These included the matter of a rumored plan for providing medical care to WPA workers; the system of examining WPA workers to ascertain ability to carry on prescribed work; and the question of supplemental medical care for WPA workers. After a discussion of these three points, the Chair appointed Dr. Gruber and Mr. Burns as a Committee to interview Mr. Pierson.

Later, this Subcommittee reported on its meeting with Mr. Pierson and Mr. Wm. F. Dorn, Compensation Director: that the rumored plan does not seem to exist; that the matter of physical examinations of WPA workers is left entirely to the District Director and that no WPA funds were available for this medical work; and that the Federal Government cannot provide supplemental medical care for WPA workers. The report was accepted and placed on file.

3. *SERA Medical Care.*—The Committee discussed all phases of this subject and efforts of various counties and state medical societies to devise plans to provide medical care to unemployables and employables on relief and WPA. Motion of Drs. Corbus-Keyport that representatives of the Michigan State Medical Society be appointed to consider with Wm. Haber, SERA Administrator, certain of the preliminary and essential features of various plans in order to get his opinion and to stress that the profession sees the necessity of a medical advisor who shall act as coördinator. Motion carried unanimously.

The Committee: Drs. Cook, Ekelund, Foster, Gruber, and Penberthy.

4. *Muskegon County Question.*—The Committee discussed the Muskegon County question presented by a WPA official in that County. (This matter referred to this Committee by the Public Relations Committee, M. S. M. S.) Full discussion ensued. Motion of Dr. Foster, seconded by several: This Committee hopes that no plan to care for WPA workers in a group or groups will be accepted by the County Medical Society. We advise that each physician deal with each man as his private patient, making such financial arrangement as seems justified. In this way only will the patient-physician relationship be maintained and work to the advantage of the physician as these workers are absorbed in private industry. It might be to the advantage of the County Medical Society to publicize this. Motion carried unanimously.

5. *Infirmiry Hospital.*—From the Crippled Children Commission came a question as to whether an infirmiry hospital in Iron County should be approved for the care of afflicted children. Motion of Drs. Corbus-Foster that this matter be referred to Councilor Manthei with all information and a

request for his investigation and advice on this. Motion carried unanimously.

6. *Physical Rehabilitation Program.*—The Chair read a letter from the West Virginia State Medical Association relative to its physical rehabilitation program of unemployable relief clients for the purpose of sending many back into gainful employment. The consensus of opinion of the Committee was that this was good public policy, and also good for the physicians who were getting a little work. The Committee instructed the Executive Secretary to obtain the mechanics of this program from Secretary J. W. Savage of West Virginia.

7. *Survey of Medical Care of Pensioners.*—Dr. Pino spoke of the proposed survey in Michigan of the medical needs of old age pensioners.

8. *Adjournment.*—The meeting was adjourned at 5:20 P. M., after the Chair had thanked all for their attendance and advice.

MINUTES OF MEETING OF THE LEGISLATIVE COMMITTEE

Detroit, Wednesday, January 8, 1936

1. *Roll Call.*—The meeting was called to order by Dr. H. H. Cummings, Chairman, at 7:45 P. M., in the Wayne County Society Building at Detroit. Present were Dr. Cummings of Ann Arbor, Dr. F. B. Burke of Detroit, Dr. L. G. Christian of Lansing, Dr. Henry Cook of Flint, Dr. L. J. Garipey of Detroit, Dr. C. F. Snapp of Grand Rapids. Also present were Secretary C. T. Ekelund of Pontiac, Dr. L. F. Foster of Bay City and Executive Secretary Wm. J. Burns. Absent was Dr. H. E. Perry of Newberry.

2. *Minutes.*—The minutes of the meeting of December 4, 1935, were read and approved.

3. *Reports of Subcommittees* on their studies of several important matters were presented in detail and approved, with commendation.

4. *Bill to Amend Afflicted-Crippled Persons' Laws.*—Dr. Garipey recommended a new commission to administer these laws and others and explained his proposal by charts. Dr. Ekelund read extracts from his proposed brochure. Report was given that the Subcommittee on Relief Medicine of the Committee on Economics has been requested by the Executive Committee of The Council to furnish the Legislative Committee with information on its survey of the costs of the afflicted-crippled child laws, as same progresses. Full discussion. No action taken at this time, it being felt that these matters must be gone over repeatedly, and that progress must be made slowly but surely. Dr. Ekelund's suggestion re appointment of a medical director by the SERA will be presented to Dr. Wm. Haber, SERA Administrator, by a Subcommittee of the Special Contact Committee to Governmental Agencies and Allied Groups.

5. *Bill to Curb Unauthorized Practice of Medicine.*—Report will be made at next meeting on this matter.

6. *Integration of Medicine.* Dr. Burke recommended that this should be considered at a later date after the work on hand has been completed.

7. *Barbituric Bill.*—The Executive Secretary reported on action of the A. M. A. re this legislation. He was instructed to write the fourteen states in which such legislation exists and ask how the laws are operating and what are the results. He was also instructed to obtain the views of the NARD and the MS Retail Drug Association toward such a bill.

8. *Eye Examinations.*—Dr. Burke reported on the ophthalmologists' activity re blind advertising of physicians M.D. employed by jewelry stores, etc., to examine eyes. He will report further progress at the next meeting.

9. *Physicians' Liens.*—The Executive Secretary reported on past attempts in Michigan to obtain legislation giving physicians first class liens in insurance cases, and in estates. He cited House Bill 135 of 1933 and House Bill 651 of 1933.

10. *Taxation of Physicians' Equipment.*—Dr. Garipey brought up the matter of taxation of physicians' equipment. This problem is one which should be approached first by the county medical society, it was felt.

11. Several communications from county medical societies were read, and appropriate action taken.

12. *Adjournment.*—The meeting was adjourned at 10:55 P. M. after the Chair had thanked all for their attendance and good advice.

COUNTY SOCIETIES

LOOK TO YOUR COUNTY MEDICAL SOCIETY

The State Medical Society Executive Committee and the Committee of Nine, representing the Michigan State Medical Society, the State Hospital Association and the State Association of Probate Judges have held several meetings, attempting to work out the care of crippled and afflicted children.

Representatives of certain hospitals at one of these meetings made two suggestions: first, that the filter systems be appointed by the hospitals and not by the doctors. (Probably some superintendent has certain stooges ready.) The second proposition was that certain hospitals agree direct with the crippled children's commission for complete care of the children, the hospitals to arrange for the medical part. This last looks like an attempt to make the doctor ultimately an employee of the hospital. Fortunately, both of these plans were defeated, but they point toward a menace. After all, the organization looking most earnestly after the doctor's rights is our own Society, and it must not be subordinate to any other.—*The Bulletin of the Calhoun County Medical Society.*

EATON COUNTY

The personnel of the new administration of the Eaton County Medical Society which takes over at once for the period of the next eighteen months according to the newly adopted Constitution and By-laws is as follows: President, Dr. H. A. Moyer, Charlotte; vice president, Dr. A. W. Myers, Potterville; secretary, Dr. T. Wilensky, Eaton Rapids; treasurer, Dr. J. W. Davis, Charlotte; delegate, Dr. A. G. Sheets, Eaton Rapids; alternate, Dr. P. Engley, Olivet.

T. WILENSKY, *Secretary.*

MIDLAND COUNTY

On December 27, the Midland County Medical Society held a special meeting, at which time Dr. L. F. Foster, of Bay City, chairman of the Public Relations Committee of the State Medical Society, addressed the meeting on the new correlation of activities in the State Society.

He especially discussed the new set-up in reference to the Afflicted Children's Commission and how the County Society can cooperate in carrying out the new agreement entered into by the Probate Judges Association, the State Hospital Association and the State Medical Association.

The new president of the Society, Dr. W. D. Towsley, will appoint the necessary committees at once.

Judge Dage LaGoe, the probate judge, and Mr. Elroy Sias, County Poor Commissioner, were present at the meeting and agreed to cooperate with the Society in carrying out the provisions of the new set-up.

DAVID LITTLEJOHN, M.D., Dr.P.H., *Secretary*.

MONROE COUNTY

Monroe County Medical Society has had an active season. We have four new members: Dr. Edgar C. Long, Monroe, who is specializing in Surgery; Dr. A. D. Blanchet, Monroe, Dr. Albert H. Reisig, Monroe, and Dr. Stanley C. Penzotti, Dundee, are in general practice.

Our programs have been as follows: November 21, Dr. Osborne A. Brines, Detroit, "The Bacteriology and Pathology of Pneumonia"; December 19, Dr. E. S. Gurdjian, Detroit, "Head Injuries"; January 16, Dr. Harold K. Shawan, Detroit, "Goiter."

The Monroe County Welfare Relief Commission has an excellent program for medical services to welfare clients. It has been found most practicable by doctors, patients, and welfare workers. During the last eight months of 1935, \$4,178.18 was paid to doctors for 2,592 medical services. The advisory committee appointed by the medical society to work with Mr. Russell H. Clark, relief administrator, consists of Dr. J. J. Siffer, Dr. H. W. Landon, Dr. Florence Ames.

Our delegate to the State Society is Dr. D. C. Denman, Monroe; alternate, Dr. J. H. McMillin, Monroe.

FLORENCE AMES, M.D., *Secretary*.

MUSKEGON COUNTY

Extracts from *Special Bulletin* giving Rules for Hospitalizing Afflicted Children under State Aid.

As was announced at the annual meeting and has been announced in the MICHIGAN STATE JOURNAL, the Council of our State Society has entered into an agreement with the Michigan Hospital Association, Crippled Children's Association, Probate Judges Association, State Administrative Board, and Auditor General's Office to care for Afflicted Children in our local hospitals.

It is necessary that we all cooperate to furnish this service, but to only those whose financial condition makes it an absolute impossibility to pay for private services and to admit to the hospitals only those patients whose medical needs are urgent and necessary. (Note: This does not necessarily mean that these must be emergencies. Where material delay is incompatible with the child's health it is an urgent case.)

The following simple rules will be applied. Please take careful note of these and follow them closely.

First: Emergency Cases. Any child under twenty-one years of age may be admitted to either hospital by his family physician. Within twenty-four hours the physician bringing in the patient must notify a member of the Medical Filter Committee. Within forty-eight hours the parent or guardian of this child must apply to the office of the Probate Judge. George Vandermolen, the County Welfare Agent, has been agreed upon by the representatives of the Medical Society and the Probate Judge to act as the Economic Filter. He will investigate and, if the parents are unable to pay for private medical attention, will order the child admitted under the Afflicted Child's Act. If he finds that the parents are able and are willing to pay a minimum amount of \$4.00 a month (half of the payments to go to the hospital and half to the physicians) the case is referred back to the admitting physician as a private case.

Mr. Vandermolen is the *sole* judge of the economic status of the patient. He will, however, welcome inquiries or suggestions regarding this phase.

The medical record of the case will be reviewed at a subsequent Saturday morning meeting of the Medical Filter Committee. The admitting physician may be called upon to justify the emergency of the case. The Medical Filter will have authority to approve or disapprove the conduct of the case if deemed necessary. He will estimate the probable days' stay in the hospital.

Chronic.—Any child under twenty-one years old who comes to you requesting or needing hospitalization, having satisfied you as to the necessity, will be sent to the Probate office for a certificate which you will complete and have returned by the patient to the Probate office. The Probate office will refer the patient to Mr. Vandermolen, and after passing his investigation, the patient will appear before the Medical Filter on a Saturday morning at 8:00 o'clock. The patient will be completely examined by this committee and if it is found that hospitalization is urgent and necessary, this will be recommended to the Probate Judge, who will commit the child to a local hospital, and the admitting physician will assume charge of the case. A bill will be rendered through the hospital then for services under Schedule "A" of the Crippled Children's Commission.

The State Society advises that we cooperate with these people in providing deferred or part payment plan.

There are bound to be a number of rough spots in this set-up. Patience, reasonableness, and honesty will assure a satisfactory program. The Probate Judge is going out of her way to cooperate with our local and State Societies in this matter. The doctors who are serving on the Medical Filter are giving their time gratis, and deserve your cooperation.

Your duty as a citizen of the State is to keep State expenses at a minimum. Your duty as a physician is to impress the private practice idea on your patients and those with whom you have contacts.

The Medical Filter for January consists of Dr. V. S. Laurin, Dr. F. N. Morford, and Dr. Henry Pyle. The first of February a doctor will be appointed to take Dr. Pyle's place for a period of three months. The first of March a doctor will be appointed to take the place of Dr. Morford for three months. The first of April one will be appointed to replace Dr. Laurin for three months. By this method no excessive demand for time is made on any member. There is a fee established by law for every certificate filled out if the patient is admitted. It is our understanding that this money is available and an attempt will be made to have the physician compensated for this service.

Remember:

First.—If you have an emergency, bring it in to the hospital as you would any other patient. If you believe it should come under the Afflicted Child's Act, notify any member of the Medical Filter within twenty-four hours. Instruct the parents or guardians to apply to the Probate Judge's office within forty-eight hours.

Second.—Any other patient who, you feel, should come under this Act is to be directed to the Probate Judge's office for certificate which is to be returned after completion to that office.

Third.—Submit your bill according to Schedule "A" to the Superintendent of the hospital.

Fourth.—Certify only those cases which you believe are urgent and necessary.

Fifth.—It is the endeavor of County and State Societies to re-educate these patients to become private patients, wherever possible.

Sixth.—Play ball with this organization. If difficulties arise, confer with the Medical Filter.

Seventh.—Mr. Vandermolen is the *sole* judge of patient's economic status.

Eighth.—The Medical Filter is the *sole* judge of the patient's medical status.

NORTHERN MICHIGAN MEDICAL SOCIETY

(Antrim, Charlevoix, Emmet, Cheboygan Counties)

The regular monthly meeting of the Northern Michigan Medical Society was held at the Perry Hotel, Petoskey, January 9, 1936, president Engle in the chair. Minutes of the last meeting were read and approved. Correspondence was read and discussed and reports of committees were heard. President Engle of Petoskey then introduced Judge of Probate Gilbert of Emmet County, who gave a brief talk on the work of the Probate Court with regard to crippled and afflicted children in his county. Judge Rueggeseeger of Charlevoix County then spoke on the work in his county. The Reverend Mr. Weaver, county agent of Emmet County, then gave a short talk on his phase of the work. These talks were followed by a general discussion of these matters by the entire Society. Drs. McMillan and Armstrong were appointed to the program committee for next month.

E. J. BRENNER, *Secretary*.

ST. CLAIR COUNTY

The first regular meeting of the new year was held Tuesday, January 7, at the Harrington Hotel, Port Huron. Twenty-six members and five guests attended. President J. H. Burley presided. Dr. Alvin Price of Detroit addressed the meeting upon the subject, "The Modern Treatment of Pneumonia." Dr. Price spoke informally covering in a practical manner the usual therapeutic agents and measures, many of which have been in vogue for years.

The speaker laid especial emphasis upon the use of oxygen, preferably in a tent, also the use of pent-nucleotide to restore the leukocyte balance whenever the daily count shows a decline in the leukocytosis.

The speaker stressed the use of Felton's Serum especially for Type one, two and seven, infections. Detailed explanation was given as to new method of typing sputum and the tests to be made for serum sensitivity in both eye and skin before the intravenous use of same. The usual dosage, at four hour intervals, according to Dr. Price, should be 40,000 as an initial dose, followed by two doses of 20,000 units each.

The speaker touched upon the use of artificial pneumothorax in the treatment of lobar pneumonia but stated that an insufficient number of cases had been so treated for any definite decision as to its benefits. The discussion was opened by Dr. George Waters followed by several others, after which Dr. Price closed.

A rising vote of thanks was given the speaker for coming up in such weather in order to address the Society.

A short business meeting followed the scientific program, after which the meeting adjourned.

At the regular meeting of Saint Clair County Medical Society held at the Harrington Hotel, Port Huron, Tuesday, January 21, 1936, twenty-seven members and six guests were present. President J. H. Burley, presided.

The minutes of the meeting of January 7, 1936, were read and approved. A letter from the office of the Prosecuting Attorney relative to irregular and illegal practitioners was read by the chairman of the Medico-legal Committee, Dr. H. O. Brush.

The president then introduced Dr. R. C. Connley of Detroit, who read a paper on "Newer Methods of treatment in Gastro-intestinal Disorders." Dr. Connley divided the subject into four parts, taking up in the order named, "Gastric Ulcer," "Gallbladder Disease," "The Unstable Colon" and "Constipation." The paper was interesting and to the point and was very much enjoyed by those present. The discussion was opened by Dr. E. W. Meredith, followed by Dr. R. M. Burke, Dr. A. J. MacKenzie, Dr. H. O. Brush, Dr. A. L. Callery and Dr. J. C. S. Battley. Following Dr. Connley's closing discussion, the meeting adjourned.

GEORGE M. KESL, *Secretary-Treasurer*.

WASHTENAW COUNTY

A regular meeting of the Washtenaw County Medical Society was held at the Michigan Union on Tuesday, December 10, at 6:15. Dinner was served to forty-eight members. About sixty attended the scientific meeting.

The speaker, Dr. C. D. Camp, was introduced by President O. R. Yoder. Dr. Camp gave a very interesting talk on the subject, "Disturbances of Sleep."

During the business session which followed, the report of the auditing committee, consisting of Drs. Carleton Peirce, Vincent Johnson, and Harold Jacox, was read and accepted. This report made known a balance in the treasury of \$455. The committee recommended an appropriation of as much as \$5.00 a month if necessary to provide adequate clerical assistance for the keeping of more up-to-date records of the business affairs of the Society.

The nominating committee submitted a report naming the following doctors as candidates for office during the year 1935: President, Norman F. Miller; vice president, Margaret Bell; secretary-treasurer, John V. Fopeano; delegates: John Wessinger, Dean Myers, John Sundwall; alternates: S. L. LaFever, H. B. Britton, Warren E. Forsythe; censors: W. J. Wright, Lester Johnson, W. M. Brace. The report was adopted and candidates elected.

The secretary reported that the membership now numbers 146. There are several physicians in the University Hospital who become eligible each year. There are also a few in the county outside the University who should be approached upon the subject of membership. It might be well to have a membership committee to approach these men.

Dr. Howard Cummings reported the activities of the State Society in reaching an agreement with the State and Hospital Association authorities on the subject of afflicted child care in the State. He emphasized the need of local support of this agreement. He urged the appointment of a Public Relations Committee to function in drawing up plans for local coöperation in this work as well as in other matters involving public relations. It being necessary to have the names of these committeemen in Lansing immediately, Dr. Yoder had appointed this committee on December 9 and the names of the members had been forwarded to the office of the State Medical Society. The committee consists of: John S. DeTar, Milan; Lester J. Johnson, corner Liberty and Fifth Avenue, Ann Arbor; J. J. Woods, 19 N. Washington St., Ypsilanti.

The meeting adjourned at 8:35 P. M.

On January 14, 1936, a dinner and business session at 6:15 P. M. was followed by a symposium on "Acute Upper Respiratory Infections," Dr. A. C. Furstenberg acting as chairman. The symposium consisted of the following papers: "Acute Rhinitis," Dr. J. H. Maxwell; "Sinus Complications," Dr. R. W. Teed; "Ear Complaints," Dr. D. W. Myers. General discussion on the part of the members was concluded with a Summary by Dr. Furstenberg.

J. V. FOPEANO, *Secretary*.

WOMAN'S AUXILIARY

Mrs. A. M. GIDDINGS, President, 22 Riverview Ave., Battle Creek

Mrs. KENNETH LOWE, Secretary-Treasurer, 107 Elizabeth St., Battle Creek

Mrs. L. C. HARVIE, Press Chairman, 341 Brockway Place, Saginaw



Mrs. A. V. WENGER, Grand Rapids
Vice President, Woman's Auxiliary, Michigan State
Medical Society.

Dear County Presidents and Members:

Our National Society under its president, Mrs. Rogers N. Herbert, is emphasizing the importance of the part played by auxiliary members in the activities of lay organizations. It is most fitting that we, as doctors' wives, should be active agents in the formation of public opinion, and directors of effort along the lines concerned with health problems, and the preservation of medical ideals. It will be interesting to learn the results of a national survey now being made to show how great is our potential influence through other channels than our own organization. This survey is being conducted in Michigan through our department of Public Relations under its chairman, Mrs. Ledru O. Geib.

It is an encouraging fact that we do have varied interests, and it is surprising how much can be accomplished even over the bridge table to combat misunderstanding and senseless gossip. An auxiliary member must be well informed, first of all, along health and medical lines. She must be alert to her opportunities, and be ready to accept, with dignified self confidence, challenges for service in women's clubs, Parent-Teacher organizations, and the like. In rendering intelligent service in that way she is adding strength to the auxiliary and to the merited prestige of the medical profession. Being fully convinced of the value in influence of such a position, your president has recently accepted a vice chairmanship of the Social Welfare Department in the Michigan State Federation of Women's Clubs. Mrs. Frank W. Hartman, president of the Wayne County auxiliary, holds a similar position in the same department.

The American Medical Association is cognizant of the importance of the auxiliaries' position by depending upon us to disseminate information regarding its radio program, a copy of which is in the hands of every county president. People generally are interested in medical topics and with such a splendid program of interesting subjects we should be able with no great effort to build up a large radio audience. Tell your neighbors about it. Mention the subject at your bridge club, and in your church circle. Ask for permission to make the announcement in your woman's club meeting or in your Parent-Teacher group.

It might be a good thing for us to borrow, for the occasion, the Boy Scout motto, "Be Prepared." Then we will be able to respond intelligently when our friends and acquaintances call upon us for information and suggestions along lines in which we are primarily interested. This, to me, is one of the primary objectives for members of our organization. Talk it over; talk it up, in your meetings. Send comments or suggestions to your president and they will be printed on our pages in the JOURNAL.

With best wishes, I am

Sincerely yours,

(Mrs. A. M.) LEAH M. GIDDINGS.

* * *

As chairman of Program, I earnestly request that each county chairman study the outline and material sent to you so that you may be able to discuss these at your auxiliary meetings. It is your duty to impress the fact upon the members that we are expected to study health questions. Let us realize this request from the National Auxiliary and do something before the year's program is closed.

The American Medical Association feels that this is a very important service we can render to the medical profession. We must be intelligent on these subjects ourselves before we can create interest in the community.

I have sent an announcement of the January radio program to each auxiliary. Let us all become enthusiasts over this program. Please make announcements before clubs and send some comments to the American Medical Association office, 535 N. Dearborn St., Chicago.

There are no better speakers than Dr. Fishbein and Dr. Bauer, so you really have something to offer radio listeners. All *Hygeia* subscribers can find programs announced in advance.

Be a good auxiliary and do your part.

(Mrs. G. C.) BERNICE HICKS.

Hygeia Subscriptions Soaring In Michigan

The Kellogg Foundation has taken out 1,965 current subscriptions to *Hygeia* to be distributed in the following counties: Barry, Branch, Calhoun, Eaton, Allegan, Van Buren and Hillsdale.

* * *

Kent County has placed *Hygeia* in 184 rural schools.

* * *

County News

Bay County.—The Auxiliary to the Bay County Medical Society held its regular meeting December 11, 1935, at the home of Mrs. A. D. Allen. A fish dinner was served to thirty-two members in the recreation room.

After a business meeting conducted by the president, Mrs. L. F. Foster, a talk was presented by Miss Agnes Halloran, Bay County Health Nurse, who explained the health program and described the work being done by that department.

MICHIGAN'S DEPARTMENT OF HEALTH

Mrs. F. T. Andrews, of Kalamazoo, past president of the Auxiliary to the State Society, was present and gave an interesting talk, telling of past work accomplished and future plans of the organization.

Mrs. L. G. Christian, of Lansing, and Mrs. I. W. Greene, of Owosso, also were guests.

The remainder of the evening was spent at bridge and Christmas prizes were presented to the high score-holders at each table.

(Mrs. K.) GENEVIEVE M. STUART, *Secretary*.

* * *

Calhoun County.—The Calhoun County Auxiliary met on January 7, 1936, at the Nurses' Lodge of the Nichols Hospital for an all day session to sew for the hospital, with Mrs. J. E. Cooper and Mrs. Winslow in charge.

A considerable number of garments consisting of T-binders, slings, tray cloths, abdominal binders and pneumonia jackets, were completed. At noon a co-operative luncheon was enjoyed, the Nurses' Lodge furnishing hot coffee and cream as well as silverware and china.

Next month's meeting will be held at the Leila Hospital.

LOIS M. URSON, *Publicity Chairman*.

* * *

Kalamazoo County.—Twenty-eight members of the Woman's Auxiliary to the Kalamazoo Academy of Medicine were present at the meeting held Tuesday, December 15, 1935, at the home of Mrs. C. B. Fulkerson. A bounteous coöperative dinner, with turkey as a special treat, was served at 6:30 p. m.

The dining table was attractively decorated with red candles. A Christmas tree and poinsettias used throughout the house added to the spirit of the season.

Members brought gifts for the old people on relief, who received a Christmas gift from the Community Christmas tree.

Following a very brief business meeting "contract" bridge was enjoyed. Mrs. Fulkerson was assisted by Mrs. W. D. Irwin, of Kalamazoo and Mrs. W. R. Young, of Lawson.

(Mrs. F. M.) WILMA G. DOYLE,
Press Chairman.

* * *

Saginaw County.—The annual Christmas Party of the Saginaw County Auxiliary was enjoyed by fifty-two members at the Hudson Party House on December 17. Dinner was served at 6:30, three large tables being used, which were centered with miniature Christmas trees and red tapers in silver holders. At each place was a tiny candlestick and before the dinner was served an impressive candle-lighting ceremony was held. While members were lighting the candles they sang "Silent Night, Holy Night," led by Mrs. Robert Leckie, soloist for the evening.

Following the dinner Mrs. Leckie, accompanied by Mrs. Norman Popp, sang several numbers and led the group in singing "Jingle Bells" and other Christmas songs.

Plans were made during the business session for a Public Relations meeting to be held in April at the South Intermediate School which will be open to all with special invitations to all P. T. A. groups, Women's Clubs, and others.

The remainder of the evening was spent at games, each one taking home a prize.

(Mrs. L. C.) DELTA A. HARVIE,
Press Chairman.

Wayne County.—The December activities of the Woman's Auxiliary to the Wayne County Medical Society began with a tea, December 3, for the wives of those doctors attending the Radiological Society of North America, which met in Detroit. Active among the hostesses were Dr. Mary Thompson Stevens, Mrs. Edward G. Minor, Mrs. Howard Doub and Mrs. Clarence Weaver.

The regular meeting of the Auxiliary was held Friday, December 13, with Dr. William J. Stapleton, Jr., the guest speaker, discussing Radio Advertising.

The sale of Christmas seals in the hospitals of the city was directed by Mrs. Fred Meader, assisted by her co-chairman, Mrs. George B. Hoops, and was gratifyingly successful.

The annual Christmas party for younger children of members, sponsored by the Wayne County Medical Society with members of the Auxiliary as hostesses, was given Saturday afternoon, December 14. Mrs. E. C. Baumgarten, co-chairman of the social committee, arranged a musical program, with a magician and Santa Claus in attendance and refreshments followed. Each guest had been asked to bring a gift for a needy child.

That same evening, members of the Social Committee of the Auxiliary served refreshments to the three hundred guests attending the Dramatic Section's productions at the Playhouse.

The holiday season festivities closed December 27 with the 'teen age party, also given annually by the W. C. M. S. Mrs. J. Whitlock Gordon, chairman of the Social Committee had charge of the arrangements for music and dancing.

(Mrs. Milton A.) WINOGENE E. DARLING.

MICHIGAN'S DEPARTMENT OF HEALTH

C. C. SLEMONS, M.D., Dr.P.H., *Commissioner*
LANSING, MICHIGAN

Progress in Sanitation

One of the most notable advances in public health for Michigan during the past year has been the unprecedented improvement in public water supplies and sewage disposal systems. As a result largely of work relief projects involving federal aid, communities have been enabled to construct new systems or make needed additions or alterations in existing ones. A program of construction that, in the ordinary course of events, it would have taken years to accomplish is well on its way to completion.

The most marked improvement has been in sewage disposal facilities.

Sewage treatment plants at Charlevoix, Charlotte and Paw Paw, all of which are PWA projects, have been completed and are in operation. Plants at East Tawas and Tawas City which were constructed with the assistance of CWA and ERA have also been completed. Additions have been made to the plant at Holland and to the one at Fremont. These two were financed independently of any governmental aid. The City of St. Ignace has also substantially completed a plant and a major portion of a sewer system which began under the CWA and has been continued under the various relief organizations since then.

The cities of Owosso, Alma, and Bessemer have plants under construction which should be completed shortly after the first of the year. The plants at Alma and Bessemer are PWA projects

while the one at Owosso was independently financed. Ann Arbor, Battle Creek and Jackson all have plants under construction. They should be completed sometime during 1936. The plant at Jackson is one which will clean up one of the worst cases of pollution in the state, leaving only the city of Lansing as a major contributor to the pollution of the Grand River.

Bids have been received for plants at Gladstone, Grand Haven and Monroe although work has not been started on any of these projects. Muskegon received bids for an intercepting sewer and expects to receive bids in December for the construction of a sewage treatment plant.

The City of Howell has authorized the issuance of bonds to defray the cost of construction of a sewage treatment plant. Ludington and Pentwater are beginning construction of their intercepting sewers leading to a proposed sewage treatment plant. The Village of Dexter is also proceeding with the construction of a sewerage system and a sewage treatment plant.

Of great interest is the receiving of bids for the construction of another section of the Detroit River interceptor, which indicates a resumption of activity leading to the elimination of pollution from the Detroit River. This is, of course, the major problem in the state from the standpoint of stream pollution. With the award of this contract, it seems likely that the subsequent contracts for the remainder of the intercepting sewer and the sewage treatment works will follow within the next year or two. Several other cities have filed projects for the construction of sewage treatment plants including Niles, Pinconning, Spring Lake, South Lyons, Three Oaks, Allegan, Big Rapids, Clare and Cassopolis.

The Villages of Bronson and Whitehall and the communities of North Park and Galewood, which are subdivisions near Grand Rapids have begun the construction of sewerage systems. The City of Midland has begun the construction of a main trunk sewer and a relief sewer for the portion of the city.

The year has marked the beginning of a certification of sewage plant operators which is being undertaken by the department for the purpose of improving the quality of personnel in charge of the operation of sewage treatment works. In the past it has been found difficult to secure proper operation of plants.

In the field of public water supplies, improvement has also been marked.

During the year with the assistance of PWA a filtration plant was completed at Port Hope and a zeolite softening and iron removal plant was completed at East Lansing. Through the same agency, filtration plants are under construction at Marine City and Muskegon, and an iron removal plant has been approved for Northville. A water supply system including both the construction of the well and a distribution system under this agency has been obtained by: Elberta, Minden, Centerville, Bear Lake, Colon and Clifford, and a new supply only was obtained by Standish.

Under WPA, filtration plants are being started at New Baltimore and Big Rapids. A clear water reservoir is under construction at Wyandotte, a standpipe at Edmore, and a water pumping station at Elk Rapids. Through the previous relief agencies such as ERA, Benton Harbor secured an aerator to the softening and iron removal plant and Alpena added to its clear water reservoir.

Although it is not definitely reported what assistance a federal agency gave, the following municipalities added to their water supply by construction of new wells: Grand Haven, Almont, Chesaning, Muskegon Heights, Lansing, Frankfort, Douglas, Inlay City, Nashville, Pentwater and Three Rivers,

while reservoirs were built at Frankfort and Lowell.

In addition to the foregoing, there has been a very extensive program of additions to the present water distribution systems in many municipalities and the replacement of old equipment.

During the year 360 construction permits have been issued for waterworks and sewerage systems or additions, alterations, or extensions to existing systems.

Improvements at Biologic Plant

A number of improvements have been made at the Biologic Plant during the past year as a result of federal grants for labor and some money for materials.

Four wooden buildings have been replaced with three fireproof structures, a root cellar has been constructed for the storage of food for rabbits and guinea pigs, and the foundation laid for a small animal house to be built in the future.

Of the three new buildings, one houses bleeding, injecting and operating rooms for horses, another is a small animal house for the bleeding and carrying of the stock of laboratory animals, and the other is used for finishing smallpox and rabies vaccine and housing animals under test.

The razed wooden buildings have been made into a storage warehouse for farm machinery and bulk supplies.

A Diphtheria Analysis

The encouraging downward trend of diphtheria has apparently been arrested. The total of cases since January 1, 1935, has been consistently below the total for the corresponding period in 1934 until the week ending December 7. Then, for the first time, the cumulative total for 1935 exceeds that for 1934.

Analysis of cases reported from January 1 to December 7, 1935, from some of the larger cities reveals interesting facts. The case rate per 100,000 for the state is 11.7. Detroit's rate is 11.4. Four other cities with populations of more than 50,000 have rates that exceed that of Detroit, and the state, namely, Pontiac with a rate of 48.7, Flint with 28.7, Lansing with 15.9 and Saginaw with 15.6. These rates are approximate and subject to correction since three weeks of December remain to be added, and there will be changes due to reallocation of cases and changing of diagnosis.

Of the cities having more than 50,000 population, Grand Rapids has one case, giving a rate of .6, and Jackson and Kalamazoo with one case each have a rate of less than 2.0.

Eight cities with populations between 25,000 and 50,000 have had no cases reported, and 11 cities in the same class have had from 1 to 5 cases each.

Less fortunate cities are Escanaba whose 11 cases give it a rate of 74.3, River Rouge with 11 cases and a rate of 59.1, Battle Creek with 14 cases and a rate of 31.3 and Bay City with 13 cases and a rate of 27.7.

The total number of deaths for the state for the first ten months of 1935 was 38 compared to 33 for the same period of 1934. The apparent rise in case incidence may still further increase the past year's deaths over those for 1934.

Toxoid, especially for younger children, is obviously indicated.

"Banish the future. Live only for the hour and its allotted work. Think not of the amount to be accomplished, the difficulties to be overcome or the end to be attained, but set earnestly at the little task at your elbow, letting that be sufficient for the day."

—OSLER.

OBITUARY

Dr. B. W. Babcock

Dr. B. W. Babcock of Grand Rapids died suddenly at his home, January 8, 1936. The cause of death was cardiac disease. Dr. Babcock was born at Lamont, Michigan, fifty-six years ago. He was a graduate of Washington University, St. Louis, Missouri. He practiced medicine in Rockford before coming to Grand Rapids twelve years ago. He is survived by his wife; one daughter, Mrs. Bernard Boshoven; one son, Clay; one grandson, all of Grand Rapids; one sister, Mrs. Agnes Ransdall; and one brother, D. F. Babcock of St. Louis, Missouri.

Dr. Charles Godwin Jennings*

Dr. Charles Godwin Jennings, Detroit, died at the hospital which bears his name, January 9, 1936, after a brief illness of pneumonia. Dr. Jennings was one of the best known internists, not only in Michigan but in the United States. Born in the state of New York in 1857, he received his early education in the schools of Seneca Falls and in 1875 graduated from the Mynderse Academy preparatory to entering Cornell University. He began the study of medicine in a preceptor's office at Seneca Falls and in 1876 matriculated and entered upon the study of medicine at the Detroit College of Medicine, whence he graduated in 1879. A significant feature in Dr. Jennings' career is the fact that he had continued to be a student. Following graduation he pursued courses in physics, chemistry, French, German and English literature under private tutors. His industry was boundless. With his large private practice, he found time to serve as attending physician and chairman of the board of trustees and of the medical of the Charles Godwin Jennings Hospital; consulting physician Harper Hospital (he was head of the department of Medicine and chairman of the Executive Committee of the Medical Board from 1912 to 1925); consulting physician to the Grosse Pointe Cottage Hospital, Sanitarium, the United States Marine Hospital, St. Mary's Hospital, 1882 to 1890, and attending physician to the Woman's Hospital from 1895 to 1900.

Dr. Jennings' teaching positions were for the most part in the Detroit College of Medicine, where he lectured on chemistry from 1881 to 1882, chemistry and diseases of children 1883 to 1888, physiology and diseases of children 1889 to 1893; he was professor of pediatrics from 1893 to 1895, when he combined pediatrics and medicine to 1910. He was professor of medicine from 1910 to 1918.

His professional society membership list, past and present, include the following: Wayne County, Michigan State and American Medical Associations. He was president of the Wayne County Medical Society in 1903; chairman of the section on diseases of children A. M. A. 1893, and vice-chairman of the medical section in 1920; President of the Detroit Academy of Medicine, 1918; Master, American College of Physicians, chairman of the Board of Governors from 1927 to 1931, and in 1931 vice president and regent. Dr. Jennings was president of the American Therapeutic Society in 1922 and president of the American Congress of Physicians in 1927.

*See editorial in this number of the JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY.

During the war he was first lieutenant of the Medical Reserve Corps, U. S. Army, 1917, and captain of the Medical Corps, U. S. Army, 1917 to 1919. He was on duty at Camp Grant as chief cardiologist in 1917.

Dr. Jennings was a voluminous writer on medical subjects. He was editor at different times of at least three national periodicals, namely, associate editor of the *Annals of Clinical Medicine*, the *Archives of Pediatrics*, 1898 to 1912, and editor of the *Microscope*, 1885 to 1890. In addition to this he was contributor to the following works of composite authorship: Tice's Practice of Medicine, the Therapeutics of Internal Diseases, and, in 1889, the Cyclopaedia of Disease of Children, besides numerous medical papers and essays in national and state medical journals.

As an ardent fly fisherman, Dr. Jennings was well acquainted with the streams of Michigan as well as the more remote regions of Canada where trout and salmon are found. Expert with the rifle as well as the shotgun, he hunted big game in the American and Canadian Rockies and in Newfoundland and New Brunswick. He had been a sailor and racing skipper from early life.

He is survived by one son, Dr. Alpheus F. Jennings of Detroit.

Dr. Hal M. Parker

Dr. Hal M. Parker, of Monroe, was found dead in his home December 23. He lived alone, his wife having died in 1933. It was thought that the doctor, who was found with his clothes on, lying on a couch, had been dead since the 20th of December. Dr. Parker had not been in good health for several years. He was born on January 23, 1865, and studied medicine at the Detroit College of Medicine, from which he graduated in 1889. He had pursued post-graduate work at Heidelberg, Germany, and at Harvard. Following his graduation he practiced at Metamora and Delta, Ohio, and also in California. He returned to Monroe, Michigan, twenty-five years ago, where, since that time, his practice had been limited to diseases of the eye, ear, nose and throat.

Dr. Dayton L. Parker of Detroit, and Dr. Thad Parker of Marley, Colorado, brothers, survive him.

Dr. James T. Upjohn

Dr. James T. Upjohn died at his home in Kalamazoo, January 25, 1936. He graduated from the University of Michigan in 1885. He was a former official of the Upjohn Pharmaceutical Company of Kalamazoo. He served three terms in the Michigan Senate and two in the House of Representatives, ten years in all. Dr. Upjohn was interested in real estate development in the upper peninsula and helped organized the Munising Paper Company and the Detroit Pulp and Sulphite Company.

Dr. Peter Stewart

In the passing of Dr. Peter Stewart of Royal Oak, organized medicine lost one of its grand old men, a gentleman of the old school. He was the soul of honesty and integrity, a despiser of all that was mean and sordid, a stickler for the highest ethics in his profession, and an exemplary husband and father and good neighbor. Born in 1869, graduated from the University of Michigan in 1891, he had practiced in Hadley and Royal Oak until the date of his death, having been in Royal Oak the last sixteen years.

Modest and unassuming but dignified in his manner, he invoked the confidence of all those with

whom he came in contact. In failing health for the past two years, his indomitable will would not allow him to give up. During the last week of his illness he could not relax and after a desperate struggle finally succumbed to a heart complication on January 2.

The sum of all tributes would be, "A good man has finished his work and passed on."

J. S. MORRISON, M.D.

GENERAL NEWS AND ANNOUNCEMENTS

The 100 Per Cent Club of the Michigan State Medical Society

Ingham County Medical Society
Muskegon County Medical Society
Oceana County Medical Society
Ontonagon County Medical Society.

The above county medical societies have paid dues in full for each and every member of the County and State Medical Society (as of January 23, 1936).

As of January 21, 1936, 101,000 cases were on WPA in Michigan, and 69,000 cases were under SERA in the 83 counties of the State.

* * *

Dr. Walter J. Cree of Detroit is spending part of the winter in New Orleans. Dr. Cree reports that there is sunshine most of the time and weather that on the whole resembles a northern spring.

* * *

Listen in on the American Medical Association's dramatized radio programs each Tuesday afternoon at 5:00 o'clock, Eastern Standard Time. Suggest to your patients that they do likewise.

* * *

Dr. Grover C. Penberthy, President of the Michigan State Medical Society, addressed the Bay County Medical Society in Bay City on January 2, 1936, on the subject, "Compensation Cases, Fees and Discussions."

* * *

Wayne University College of Medicine presents a course in Medical Economics to its senior class, composed of 76 students. The lectures are given every Saturday morning, beginning at 8:00 A. M., 629 Mullett St., Detroit.

* * *

The Yakima County Medical Society of Washington has a brochure on sickness insurance and on the socialization of medicine. For copies, write Dr. H. F. Alwood, President, Yakima County Medical Society, Yakima, Washington.

* * *

Dr. Shattuck W. Hartwell of Muskegon has been appointed to the Committee on Preventive Medicine by President Penberthy to take the place of Dr. Roy H. Holmes, who has been appointed as a member of the Public Relations Committee.

The State Bar of Michigan has moved its offices to 412 Olds Tower, Lansing, Michigan. An executive secretary is soon to be appointed to handle detail work for the lawyers, and to accomplish the integration of the bar in accordance with recent legislation in Michigan.

* * *

U. S. Public Health Service announces openings for senior medical internes in positions existing now and others which will occur about July 1. Second year medical internes interested in the service as a career may procure information by writing the U. S. Public Health Service, Washington, D. C.

* * *

Due to length of the annual reports of officers and committees, published in this issue of THE JOURNAL, the itemized report of receipts and disbursements for 1935 will be published in the March issue.

The February issue contains the auditor's report submitted by Ernst & Ernst.

* * *

The wages of employees of the WPA and other federal employees may not be garnished in the state courts, according to a recent ruling of the Attorney General of Michigan. It is pointed out that the Federal Government and its instrumentalities are exempt from garnishment, providing they are not engaging in private enterprises.

* * *

The Subcommittee on Relief Medicine of the Medical Economics Committee, Michigan State Medical Society, is composed of the following physicians: Dr. S. W. Insley, chairman, Detroit; Drs. E. W. Bauer, Hazel Park; T. K. Gruber, Eloise; Harold Miller, Lansing; Vernor M. Moore, Grand Rapids, and A. B. Murtha, Pontiac.

* * *

A brochure giving the facts on the practice of medicine as it now exists, and on the tireless efforts of certain well-paid propagandists to turn the profession into a "trade," is being prepared by the Michigan State Medical Society. In a few weeks, a copy will be sent to every member of the Michigan State Medical Society. Doctor, know the Truth, and Spread your Knowledge.

* * *

Counties are liable for the expense of dependent children in need of hospital care, states an opinion from the Attorney General of Michigan which holds that Probate Courts shall, when the health or condition of the child requires, cause such child to be placed in a public hospital or in an institution for treatment or special care, or in a private hospital or institution for special care.

* * *

Opportunities for physicians: A. N. Buhler, City Clerk of Mackinaw City, writes that that community offers an opportunity for a general practitioner. If interested, write the City Clerk.

Mackinac Island has an opening for a physician, due to the recent death of a practitioner on the Island. For details write Dr. J. E. McIntyre, Secretary, State Board of Registration in Medicine, Hollister Building, Lansing.

* * *

The Michigan State Medical Society's 71st Annual Meeting will be held in Detroit at the Book-Cadillac Hotel next September. Although the exact date has not been decided as yet by the Council, it is probable that the week of September 20 will be chosen, as this time is free from conflicts with the meetings of other medical organizations. Plan to attend. Get your hotel reservations early. It is anticipated that 2,500 will register.

Dr. J. L. Johnson, in his President's Page in the *Maine Medical Journal*, says: "The Medical Association will not be what it should be; the practice of medicine will not be what it should be; the individual welfare of you, Mr. Individual Doctor, will not be what it should be until *you yourself personally* wake up and take more interest in the affairs of the State Association.

* * *

Dr. J. M. Robb, Detroit, was appointed by The Council of the Michigan State Medical Society as a member of the Advisory Committee on Postgraduate Education. This is a permanent standing Committee of the Michigan State Medical Society which arranges the postgraduate work done jointly by the Michigan State Medical Society and the Department of Postgraduate Medicine of the University of Michigan.

* * *

Did you study the radio debate on state medicine? This was held over the National Broadcasting Company network on November 12, 1935. Speakers for the affirmative were William T. Foster and Bower Aly; speakers for the negative were Dr. Morris Fishbein and Dr. R. G. Leland. Every practicing physician should know the arguments of both sides. They were published in *The Bulletin of the American Medical Association*, last issue.

* * *

Program Committee chairmen of county medical societies, attention! Do you wish a member of the Public Relations Committee of the Michigan State Medical Society to address your membership? If so, contact the Executive Office, 2020 Olds Tower, Lansing, 5-3355. To comply with your requests, the various Councilor Districts have been assigned to the nine members of the Public Relations Committee, as an aid to the work of each Councilor.

* * *

The Bulletins being published by various county medical societies of Michigan are well worthy of congratulation. The *Jackson Bulletin* has a new cover for its February number, and the innovation of a perforated sheet on which is printed the list of officers; this is a help to the members who wish to clip the sheet for reference purposes. Congratulations are due the editors of county society bulletins for their efforts and excellent results.

* * *

The Northwest Regional Conference will be held at the Palmer House, Chicago, on Sunday, February 16, beginning with breakfast at 8:30 A. M. Dr. R. H. Pino of Detroit, Chairman of the Medical Economics Committee of the M.S.M.S., will discuss the subject "Standardization of the Activities of the Committees on Medical Economics of the Midwest and Northwest." All members of the Michigan profession are invited to attend this interesting conference.

* * *

"There is a gentleman now living in Detroit who remembered when as a young man he rode on horseback through the State each year to inspect the Indian villages, and there was not then a white man living in the State five miles west of Detroit. This was in 1820." Extract from the *Medical History of Michigan*, volume 1.

A fascinating story of medicine from the earliest days of Michigan history down to the present—

FEBRUARY, 1936

every physician in the State should have these two volumes. Reduced price, \$2.50 each.

* * *

Literature relative to state medicine, sickness insurance, and socialization of medicine, will be supplied by the Michigan State Medical Society to the library of every high school, college, and university in the State of Michigan. A total of over 1,000 packages of material will be mailed from the Executive Office in Lansing during February.

Any member of the Michigan State Medical Society who desires one of these packages may procure same by writing the Executive Secretary, 2020 Olds Tower, Lansing.

* * *

The first annual golf tournament of the Michigan State Medical Society will be held in Detroit next September on the Sunday preceding the Annual Meeting of the Michigan State Medical Society. This was announced by Dr. Grover C. Penberthy, President, on the occasion of "Michigan State Medical Night" in Jackson on January 21, 1936. Dr. Penberthy has promised to present the "President's Cup," and Dr. Frank Reeder will donate the "Speaker's Cup." If you can swing a putter, plan to be on hand at this glorious affair next September.

* * *

The annual lectures under the auspices of the Beaumont Foundation of the Wayne County Medical Society will be held in Detroit on March twenty-third and twenty-fourth. Dr. Charles A. Doan, professor of medicine and director of the department of medical and surgical research, Ohio State University, will be the lecturer. His subjects are (1) Functional Reciprocity between the Myeloid and the Lymphatic Tissues: A Fundamental and Physiological Law with Definite Clinical Significance, (2) Hemolytotoxic Equilibrium with Special Reference to Pathologic Physiology of the Spleen. These lectures are open to all members of the Michigan State Medical Society who wish to attend.

* * *

Military Surgeons to Meet in Detroit

The Association of Military Surgeons of United States will hold their national convention in Detroit, in 1936. Lieutenant Colonel Burt R. Shurly was named general chairman of the Executive Committee, and Major Bernhard Friedländer was named membership chairman.

All officers who served in the Spanish War, World War, and all officers of the Medical Reserve Corps are eligible for membership in this Association. All the doctors who are eligible are requested to send their names to the membership chairman, Major Bernhard Friedländer, 300 Rowena, Detroit, Michigan and help make the coming convention a success.

* * *

Post-graduate conferences for physicians will be held at the Herman Kiefer Hospital auditorium at 10:00 A. M. each Wednesday morning during the month of February, as follows:

February 5:	10-11	Pathology of Tuberculosis
	11-12	Scarlet Fever
February 12:	10-11	Preventive Measures in Tuberculosis
	11-12	Whooping Cough
February 19:	10-11	Diagnosis (Childhood and Adult Type Tuberculosis)
	11-12	Diphtheria
February 26:	10-11	Differential Diagnosis of Tuberculosis
	11-12	Anterior Poliomyelitis

These conferences are sponsored by the Wayne County Medical Society, the Detroit Tuberculosis

GENERAL NEWS AND ANNOUNCEMENTS

Sanatorium, and the Detroit Department of Health. They are arranged for by the Contagious Disease and Tuberculosis Committees of the Medical Society.

* * *

The American Medical Directory, 14th Edition, will be published in 1936. All members of the Michigan State Medical Society are urged to check their listings in the American Medical Directory and if any changes are to be made, to send same to the American Medical Association, 535 North Dearborn Street, Chicago, Illinois, before February 15, 1936. The names of members of the State Medical Society are listed in capital letters.

It is important that you are listed as a member. Some men who have not been so listed have possibly lost appointments with industrial firms, insurance companies, railroads, etc. They may have been members and let their membership lapse, or new men in the community who failed to join their local society in time to indicate this information in the Directory.

Protect yourself. Check your name. Write the A.M.A. today.

* * *

The filter system for the medical care of afflicted-crippled children has been integrated in Michigan in all but two counties (as of January 21, 1935). This is remarkable work, considering that the filter system was unknown until the Committee of Nine met in Lansing on October 30, 1935. In less than three months, the county medical societies of the state, those covering seventy-nine of the eighty-three counties, have integrated a new system and completely organized a threefold set-up: (a) appointed a Public Relations Committee, (b) established a medical filter, and (c) arranged for an economic investigation committee to work in an advisory capacity with the probate Judge.

The county medical societies of Michigan are able to accomplish any plan which works for the benefit of the public—proof of this has been given! The help of the Michigan State Medical Society is always available, to assist in integrating programs through all the eighty-three counties of the State.

* * *

Dr. Henry Cook Addresses the Senior Group

The regular monthly meeting of the Senior Group of Physicians was held at the Wayne County Medical Society at noon (luncheon), January 15. The group was addressed by guest speaker Dr. Henry Cook of Flint, chairman of the Council of the Michigan State Medical Society. We print Dr. Cook's address in full in the March number of the JOURNAL. After Dr. Cook's address, he was presented with a gavel by Dr. Henry A. Luce. On the silver band about the gavel was inscribed Dr. Cook's name and the occasion of the presentation.

Among those present were: Drs. R. L. Clark, J. W. Ferguson, J. M. Hart, Andrew Biddle, Emil Amberg, Chester Paull, L. J. Hirschman, G. Penberthy, Henry Cook (Flint), William J. Stapleton, Jr., H. B. Garver, A. S. Brunk, C. E. Boys (Kalamazoo), F. E. Reeder (Flint), Henry A. Luce, J. H. Dempster, L. M. James, Bruce Anderson, A. L. Cowan, Wm. Fowler, C. S. Ballard, H. D. Kidney, W. C. Laurence, M. E. Dawforth, J. H. Greenwood, J. H. Hodger, Wm. Hackett, H. G. Palmer, Hugh Harrin, James W. Scott, A. G. Huegli, S. H. Knight, A. K. Northrop, Walter J. Wilson.

* * *

The American College of Physicians Will Meet in Detroit

The Twentieth Annual Session of the American College of Physicians will be held in Detroit with

headquarters at the Book-Cadillac Hotel, March 2-6, 1936.

Dr. James Alex. Miller, of New York City, is president of the college, and has arranged a program of general scientific sessions of great interest to those engaged in the practice of internal medicine and associated specialties. Dr. James D. Bruce, Vice President in Charge of University Relations, University of Michigan, is vice chairman of the Committee on Arrangements, and has in charge the preparation of an all-day program to be conducted at the University of Michigan on Wednesday, March 4. Dr. Walter B. Cannon, Professor of Physiology at Harvard University Medical School, will deliver the annual Convocation oration on "The Role of Emotion in Disease." Dr. Miller's presidential address will be on "The Changing Order in Medicine." About fifty eminent authorities will present papers at the general scientific sessions while clinics and demonstrations will be conducted at the Harper, Receiving, Ford, Grace, Herman Kiefer and Children's Hospitals, of Detroit.

* * *

The Coöperative Medical Advertising Bureau—what is it? This may be the inquiry of some physicians of this State. The Bureau is a department of the American Medical Association and has been in existence twenty-three years. Its purpose is to service the State Journals in the procurement of high-class ethical advertising. Of the thirty-four state medical journals in the United States, the Coöperative Medical Advertising Bureau serves thirty-two. The value of the Bureau as a selling organization cannot be overestimated: it presents to a prospective advertiser the attractive proposition of reaching over eighty thousand physicians in forty-two states. It offers him an opportunity to bring his message to this preferred-customer group every month with the least possible trouble. One piece of copy is all that need be prepared for thirty-two outlets. No wonder that advertisers placed with the Bureau during the twenty-three years of its existence a total gross of \$2,027,869! In 1935 alone, the gross advertising amounted to \$134,477, distributed among the thirty-two journals. To the individual State Journals, the Bureau has been of invaluable help not only in placing advertising, in securing copy and plates, but in the indispensable feature of collecting for the contracted business. Literally, the Bureau assumes the burden of removing the bitterness from a very large cup, and it accomplishes its purpose successfully. More than that, it limits its income to actual expenses, and each year sends back to the individual journal a cash rebate, which generosity is not part of its agreement. In this State, the rebate in 1935 cut the net cost of the Bureau's commission to 13.1 per cent on the total business placed in our JOURNAL. This is a very low cost for the high type and generous amount of service rendered. During its existence, the Bureau has rebated to the State Journals, out of its commission of 20 per cent, the amazing sum of \$130,798!

This is a thumbnail answer to the question about the Coöperative Medical Advertising Bureau. Roughly, it handles about five-eighths of the advertising placed in your Journal. Its use throughout the years has proven to be "good business."

* * *

Dr. Max Ballin Memorial Lectures

The North End Clinic, Detroit, has put on an interesting post-graduate course of lectures on Disease of the Gastro-intestinal Tract, given Thursday evenings, January 9 to February 7. Those given were as follows:

1. January 9

The Important Phases of the Applied Physiology

JOUR. M.S.M.S.

of the Gastro-intestinal Tract and Biliary Tract—A. C. Ivy, M.D., Professor and Head of the Department of Physiology and Pharmacology, Northwestern University Medical School, Chicago, Illinois.
2. *January 16*

The Diagnosis and Management of Cholecystitis.—B. B. Vincent Lyon, M.D., Assistant Professor of Medicine, Jefferson Medical College and Chief of Clinic, Gastro-intestinal Department, Jefferson Hospital, Philadelphia, Pennsylvania.

3. *January 23*

(a) Indication for Surgery in Gall Bladder Disease and Post-operative Results—C. D. Brooks, M.D.

(b) Diagnosis of Gall Bladder Disease by X-ray—(15 minutes)—Arthur R. Bloom, M.D.

4. *January 30*

(a) Pitfalls in the Diagnosis of Colon Disease—Louis J. Hirschman, M.D.

(b) Interpretation of Gastro-intestinal Symptoms—(15 minutes)—S. G. Meyers, M.D.

The February lectures are as follows:

5. *February 6*

Indications for Surgery in Peptic Ulcer and Post-operative Results—Frederick A. Coller, M.D., Professor of Surgery, University of Michigan, Ann Arbor, Michigan.

6. *February 13*

Non Gastro-intestinal Diseases (excluding neurosis)—Leon Bloch, M.D., Attending Physician on the Staff of the Michael Reese Hospital and Assistant Clinical Professor at Rush Medical College, Chicago, Illinois.

7. *February 20*

(a) Management of the Peptic Ulcer Patient—Frederick G. Buesser, M.D.

(b) Newer methods in the Treatment of Peptic Ulcer—(15 minutes)—(LaRostidin, Synodal, Vaccines, Silicon Dioxide, Etc.)—David J. Sandweiss, M.D.

8. *February 27*

Nervous Dyspepsia—Walter C. Alvarez, M.D., Head of Section in Division of Medicine, Mayo Clinic, and Professor of Medicine in Graduate Medical School in the University of Minnesota, Rochester, Minnesota.

The last is the Dr. I. L. Polozker Memorial Lecture. The lectures are open to the medical, dental and allied professions.

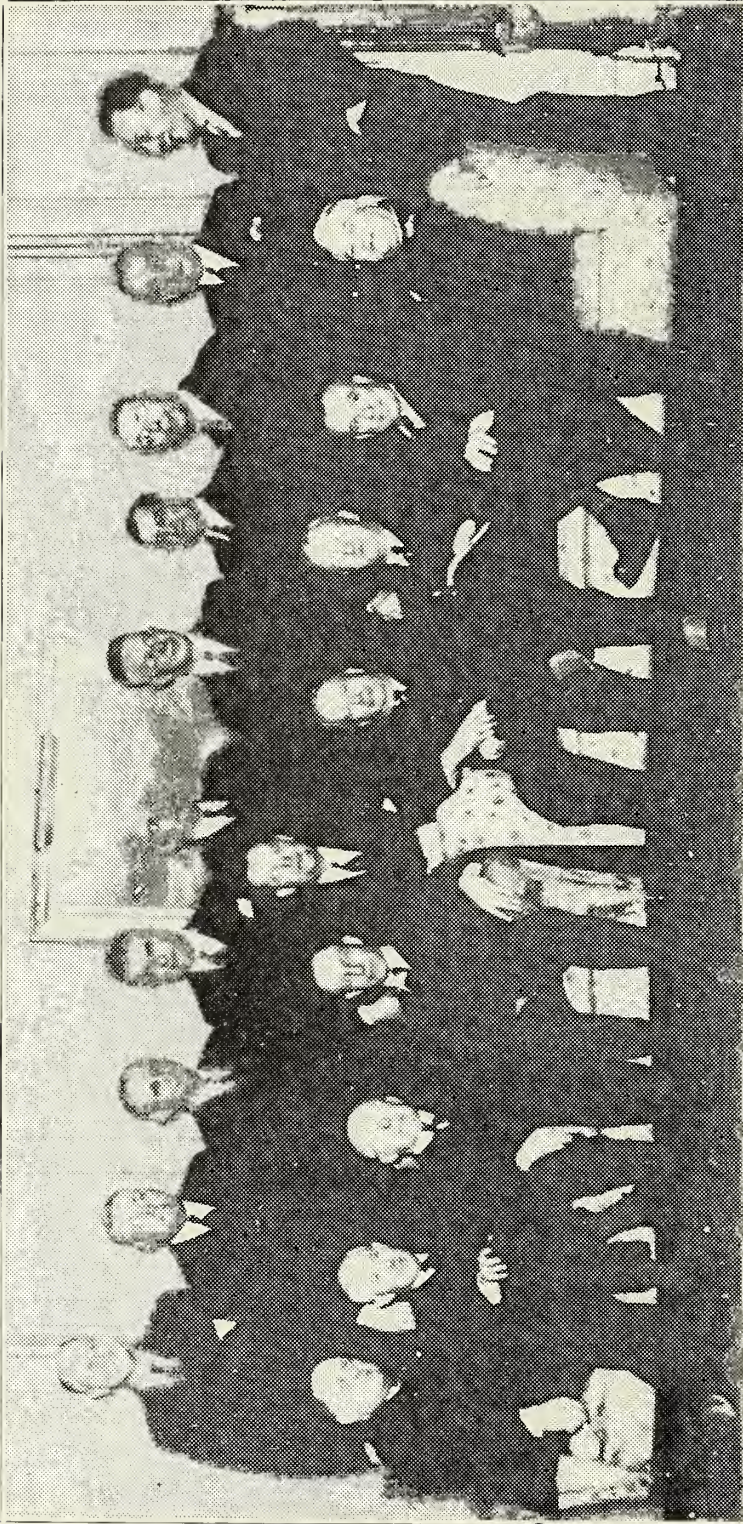
The Heart in Hypertension

George Fahr, Minneapolis (*Journal A. M. A.*, Nov. 2, 1935), points out that 55 per cent of the appalling death rate consequent to essential hypertension is due to heart failure. Moreover, heart failure of some degree is nearly always present in cases of essential hypertension in which death occurs in uremia or from apoplexy or cerebral softening. The heart in hypertension shows left ventricular hypertrophy and dilatation with varying grades of replacement scarring in the muscle. There is some coronary arteriosclerosis present in 90 per cent of the cases. The coronary narrowing is responsible for scars found in the heart muscle. A very high percentage of patients with angina pectoris and coronary arteriosclerosis have high blood pressure complicating the cardiac picture. Hypertension and coronary arteriosclerosis are so intimately and frequently associated that they should be considered together and the term "hypertensive heart disease" or "hypertension heart" should connote coronary involvement.

What has been termed "chronic myocarditis" is usually the result of high blood pressure and coronary artery disease and not the result of infection. Heart failure in the clinical sense does not develop in hypertension until many years (from ten to twelve) have passed unless the coronary disease accompanying the high blood pressure becomes very severe or unless some other cardiac complication is present. Many patients with hypertension live fifteen years or more and finally die of one of the other consequences of hypertension, though some degree of heart failure may have been present previously or at the time of death.

Use of Heat in Diseases of Nervous System

Clarence A. Patten, Philadelphia (*Journal A.M.A.*, Sept. 7, 1935), points out that heat is frequently used in the treatment of both organic and functional nervous disease and provides a very effective therapeutic agent. It is used in many ways both locally and generally. Heat is generally used systemically in the treatment of the psychoses and is usually of considerable advantage if used over a long period of time. It is definitely of greater value in the agitated and maniacal mental states because of its sedative effect, but it is not particularly effective in the depressions except occasionally in agitated melancholia. The means by which heat is applied in mental states in the order of their efficacy are: the continuous hot bath, the cold pack, the warm pack, cabinet sweats and conditioned heat. The continuous hot bath is used particularly in cases of maniacal excitement and maintains a steady temperature of about 96 to 98 F. and sometimes more. Neither cold nor warm packs are used in the presence of circulatory or cardiac derangement or when the patient is in a very weakened condition. Electrical cabinet baths are frequently used for coöperative mental patients for the purpose of obtaining the effects of varying degrees of heat over a short period of time as well as elimination through free perspiration. Various forms of heat therapy are used in the organic psychoses, particularly dementia paralytica. In dementia paralytica the continuous baths are helpful when the patients are markedly excited, but only for the sedative effects. For the purpose of combating the disease, more vigorous heat therapy is needed. Cabinet bakes, electric heat blankets and the conditioned heat apparatus are quite effective. In the psychoneuroses the so-called tonic electric cabinets given every day and followed by hot and cold contrast showers afford a great stimulus to the patient and in addition occupy a certain part of his time, which is of importance. Hydrotherapy in the form of hot and cold showers alone can be given daily. Electric "baking" with hydrotherapy is only a part of the general treatment of the neuroses and dependence must not be placed on it alone. Heat is of the greatest value in inflammations of the peripheral nerves and in vascular diseases in which implication of the nervous system is evidenced by pain of greater or lesser severity. In certain vascular diseases of the limbs, such as erythromelalgia, Raynaud's disease, thrombo-angiitis obliterans, thrombophlebitis and endarteritis obliterans, dry heat applied to the diseased parts more or less constantly over a period of days causes an alleviation of the symptoms of pain. Even in chronic diseases of the nervous system, such as hemiplegia or lateral sclerosis, when the limbs are spastic, heat will decrease the spasms and contractures, at least for a time, and will moderate other symptoms. In chorea of the acute variety, provided no heart disease exists, any method of applying heat generally will be found to produce remarkably sedative results. Most frequently the continuous tub is employed, but for an hour or two at a time.



GROUP OF GUESTS AT JACKSON DINNER AND LOCAL OFFICERS

Seated left to right: Claude Keyport, Grayling; I. W. Greene, Owosso; J. H. Dempster, Detroit, Editor Michigan State Medical Journal; Grover Penberthy, Detroit, President Michigan State Medical Society; Charles Dengler, President Jackson County Medical Society; Henry Perry, Newberry, President-elect Michigan State Medical Society; Howard Cummings, Ann Arbor; J. E. McIntyre, Lansing; A. G. Sheets, Eaton Rapids.

Standing left to right: F. T. Andrews, Kalamazoo; Frank Reeder, Flint; Henry Cook, Flint; Phil Riley, Jackson, Chairman; L. G. Christian, Lansing; Paul Urmston, Bay City; A. S. Brunk, Detroit; Carl Brucker, Lansing; L. F. Foster, Bay City; Wm. J. Burns, Lansing, Executive Secretary Michigan State Medical Society.

STATE SOCIETY NIGHT AT JACKSON

The Jackson County Medical Society held a State Society Night in place of their regular monthly meeting at the Hayes Hotel, on Tuesday evening, January 21, 1936. Dr. Philip Riley, vice speaker of the house of delegates, was the entertainment chairman for the evening and issued about fifty invitations to state medical society officers, councilors and committeemen to be the guests of his county society on that occasion. The attendance was large in spite of the blizzard.

The meeting opened with a cocktail hour at 5:30 on the mezzanine floor of the hotel, after which dinner was served in the main dining room of the hotel. Following the dinner the meeting was opened by Dr. Charles Dengler, president of the Jackson County Medical Society, who made an address of welcome and then turned the meeting over to Dr. Riley, who explained the general purpose of the meeting. The first guest speaker was Dr. F. A. Baker, Pontiac, member of the Economics Committee, who made a few appropriate remarks and concluded them with his famous story of Joe and Pete and the Mayor of Montreal.

Following the custom of many luncheon clubs, each person present rose and introduced himself and the guests added the name of their home city and the position they held with the state society. Dr. J. E. Ludwick of Jackson gave a résumé of the method of handling indigent venereal disease work in Jackson. He was followed by Dr. H. A. Brown, president of the Jackson Academy of Medicine and Dentistry, who explained the Jackson County set-up for indigent city and county work. This latter plan includes only the hospitalization of adults.

The next speaker, Dr. A. G. Sheets, Eaton Rapids, delegate from Eaton County, outlined the work in his county with the supervisors and expressed the pleasure of his group in being made a member of the second district. He was followed by Dr. Henry Perry, Newberry, president-elect of the Michigan State Medical Society, whose theme was the importance of belonging to the state society and being interested in medical politics. He gave a brief summary of the recent advances made by the council in the crippled children problem. His statements in that connection are reserved for other sources of information to make public as they see fit.

Dr. J. Milton Robb, Detroit, past president of the state society, was then introduced and made a few remarks on the value and limitations of the social worker and the fact that medical parasites are becoming rarer every day with the new enthusiasm of the doctors in this state. Dr. Henry Luce, Detroit, past speaker of the house of delegates, spoke in glowing terms of the work of the delegates and was presented with a floral piece by Dr. J. J. O'Meara, who had just purloined it from its receptacle in the lobby.

The entertainment chairman was pleased with the next speaker, Dr. Frank E. Reeder of Flint, his immediate chief, who somehow had arranged to have the golf trophy won by Dr. Riley last summer resurrected from its hiding place so that he could have the honor of presenting it to Dr. Riley. His twenty-six years of practice made it appropriate for Dr. Reeder to introduce three Jackson men at his table: Drs. Roberts, Lathrop and Glover, who had each been in the harness fifty years. His "blue ribbon" story was the prize of the evening. He closed his remarks with a tribute to Dr. Luce and a compliment to the Jackson group in being the first county society to have a state society night.

All those present were asked by Dr. O'Meara to

stand for one minute in memory of Mr. George Campbell, a salesman of medical supplies in the state for many years and the donor of the golf trophy, whose death occurred about three months ago.

The next speaker was Dr. Grover Penberthy, Detroit, president of the Michigan State Medical Society, who covered the subject of the future of the state society. In doing so he complimented Drs. Christian, Bradley, and others for their work of the past year which has laid the foundation for the plans of 1936 and years to come. He touched briefly on the different types of committees and the work they do in organized medicine in this state.

Dr. Henry Cook, Flint, chairman of the Council, gave a summary of the work of the Council in the past year and urged local units to become more active, especially in the development of teachers in the home society and the keeping intact of the personal relationship between the doctor and his patient. Brief remarks were made by Dr. T. K. Gruber, Detroit, president of the Wayne Medical Society, and Dr. Paul Urmston, the councillor from Bay City.

Dr. Riley then introduced the new executive secretary, "Bill" Burns, who is making 2020 Olds Tower, Lansing, an address that will long be remembered in the minds of state legislators at Lansing. Bill first announced a golf tournament for next fall. He stated that there are 5,500 doctors in the state, of whom at least 4,500 should be members of the state society, which, with the 3,700 who now belong, makes a total of 800 who should return to membership this year. The state society has fourteen committees and ten sub-committees. In the new set-up for the crippled children work there are only five county societies that have not yet organized for this work. In the eighty-three counties in Michigan there are eighty-eight probate judges most of whom have been contacted in this work and their own association has promised to bring the recalcitrant members into line at once. He paid a great tribute to Judge MacAvinchey for the wholehearted manner in which he has approached the problem as a member of the Committee of Nine.

Four other guests were introduced: Dr. C. T. Ekelund of Pontiac, medical secretary of the Michigan State Medical Society; Dr. L. F. Foster, of Bay City, chairman of the Public Relations Committee, who has visited practically every county in the state within the last month, carrying the message of his committee; Dr. L. G. Christian of Lansing, member of the Legislative Committee and introduced as the representative of Ingham County; and Dr. J. E. McIntyre of Lansing, councillor of the second district, who urged the adoption of a basic science law which would automatically take care of the cults. He discussed the recent action of the lower court in Jackson in failing to convict a healer who, through a local error, was tried on the basis of not reporting a communicable disease rather than on the practicing of medicine without a license.

Dr. Riley then turned the meeting back to the president, Dr. Dengler, who announced a proposed slogan for Jackson County: "The Health of the Citizens of Jackson County Is Our Business and All We Ask Is the Privilege of Minding Our Own Business." Several motions were made from the floor by the guests expressing their appreciation of the efforts of the Jackson County Medical Society toward making the evening interesting and pleasant. The meeting was then adjourned. Attendance, ninety.

Guests from out of town other than those whom it was possible to call on for remarks included the following: Drs. C. S. Tarter, Bay City; H. H.

Cummings, Ann Arbor; A. S. Brunk, Detroit; H. A. Miller, Lansing; T. K. Jones, Marshall; Karl B. Brucker, Lansing; D. V. Hargrave, Eaton Rapids; R. H. Pino, Detroit; J. H. Dempster, Detroit; Thomas Gruber, Detroit; C. R. Keyport, Grayling; H. F. Mattson, Hillsdale; L. W. Day, Jonesville; E. B. McGavran, Hillsdale; T. E. Wilensky, Eaton Rapids; F. T. Andrews, Kalamazoo, and I. W. Greene of Owosso.

**DR. H. H. CUMMINGS, ASSISTANT
DIRECTOR POSTGRADUATE MEDICAL
EDUCATION**

Dr. Howard H. Cummings of Ann Arbor has been appointed assistant director of post-graduate medical education of the medical department of the University of Michigan. Dr. Cummings will be as-



DR. HOWARD H. CUMMINGS

sistant to Dr. J. D. Bruce, who is director of the department of post-graduate medical education and vice president of the University. His position is part time, and he will, therefore, continue to carry on his practice. Dr. Cummings' appointment is a popular one with the medical profession of the state. He is councillor for the 14th district, having succeeded Dr. Bruce in that capacity. As councillor, he is chairman of the legislative committee as well as a member of the publication committee of the council of the Michigan State Medical Society.

Dr. Cummings takes up the position of assistant director with a fine cultural background. He matriculated into the University of Michigan in 1905 and graduated in 1910. During his undergraduate years, he was student assistant in physiology in 1909 and student assistant in pathology in 1910. He spent the summer of 1910 in post-graduate work in obstetrics at Johns Hopkins University. The year 1910-1911, he was assistant in the department of Obstetrics and Gynecology at the University of Michigan and instructor in the same subjects from 1911 to 1913. He was executive head of the University health service from 1913 to 1917 and was

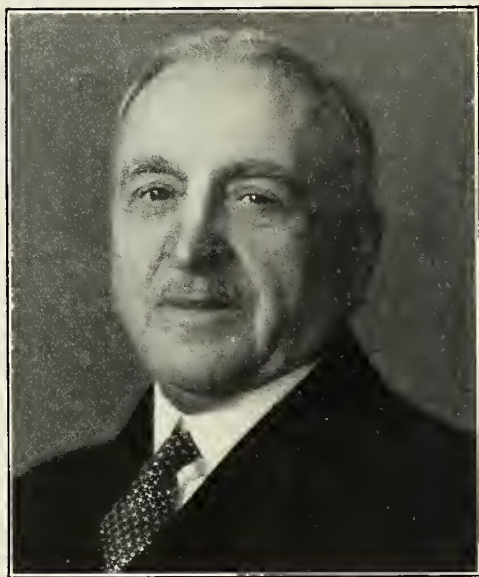
associated with the department of Hygiene and Public Health in 1917-1918. He entered private practice in 1919, limiting his work to obstetrics and gynecology and, since then he has also been gynecologist and obstetrician at the St. Joseph's Mercy Hospital.

Dr. Cummings' interest in medical affairs is evidenced by the fact of his membership in various organizations. He is past president of the Washtenaw County Medical Society; a member of the American Board of Obstetrics and Gynecology; fellow of the American College of Surgeons; a member of the Michigan Trudeau Society; member of the Central Association of Gynecology and Obstetrics; in addition to his activities in connection with the council of the Michigan State Medical Society, which are well known.

The Department of Post-Graduate Medicine, as well as the Michigan State Medical Society, is to be congratulated on this appointment of Dr. Cummings.

DR. McLEAN HONORED

On the evening of January 9, the Detroit Academy of Surgery honored Dr. Angus McLean at a complimentary dinner given at the Detroit Athletic Club. The dinner marked over half a century of active surgical practice. Dr. McLean was one of



DR. ANGUS McLEAN

the founders of the Detroit Academy of Surgery as well as its first president. Dr. Joseph Andries, president of the academy, announced that the event was a regular meeting of the academy and that he hoped the discussants for the sake of the numerous guests present would avoid the undue use of technical terms, which of course was appreciated by the many present who were unaccustomed to the scalpel as an instrument of practice. The impression of the writer (not a surgeon) was that the entire academy of surgery turned out en masse. However, our observations indicated that there was an equal number who could not qualify as surgeons. There were guests from Port Huron, St. Clair, Grayling, Owos-

so, Flint, Ann Arbor, Grand Rapids, as well as many other places large and small.

The banquet brought together a large gathering of friends of Dr. McLean who had responded to do him honor. The Board of Education of which Dr. McLean has been a member for twelve years was there in full force.

The program consisted of two prepared addresses and a large number of extemporized tributes to Dr. McLean. The addresses were by two of Dr. McLean's satellites, Dr. Ray Andries and Dr. Wyman D. Barrett.

Dr. Andries read a paper illustrated by lantern slides commenting on Dr. McLean's scientific contributions to surgery. Many of the illustrations (by lantern slide) were photographs of Dr. McLean from the time he entered practice to the present day. A number of special surgical operations were both described and illustrated.

Dr. Barrett, who had been associated with Dr. McLean for twenty-one years, spoke of Dr. McLean's technic and described and illustrated instruments that had been devised by him.

Among others who were called upon for brief addresses were Drs. Grover C. Penberthy, R. C. Jamieson, James Inches, L. J. Hirschman, Mr. Frank Cody, Dr. Spain, Colonel Edwin George, Mr. Webster, Dr. Biddle, Dr. DeGurse, Dr. Bullock. Angus McLean, at the request of the evening, was called upon and spoke briefly in appreciation of the honor done him.

On the menu appeared the following important dates in Dr. McLean's active professional career:

- 1862 Born in St. Clair County, Michigan, April 4
- 1886 Graduated from the Detroit College of Medicine.
- 1888 Entered the office of Dr. H. O. Walker and later pursued post-graduate work in Surgery in Edinburgh
- 1888 to 1891 City physician.
- 1895 to 1901 Surgeon to Detroit Police Department.
- 1905 to 1913 Professor of Clinical Surgery, Detroit College Medicine.
- 1905 to 1913 Member of the Michigan State Board of Health. Last four years, chairman of same. President of the Wayne County Medical Society.
- 1917 Commissioned as Colonel and sent to France as Commanding Officer of Base Hospital 17, which he had organized before leaving.
- 1919 Sent to Italy as President of Medical Commission.
- 1919 September 15. Awarded Diploma of Honor by the French Government in testimony of his services at Dijon. The same year the French Government also recommended him for the Legion of Honor.
- 1920 President of the Michigan State Medical Society.
- 1921 PRESIDENT AND ONE OF THE FOUNDERS OF THE DETROIT ACADEMY OF SURGERY.
- 1921 August 21. Awarded the Distinguished Service Medal of the American War Department.
- 1922 Dr. McLean was Professor of Surgery up to this date when he was elected member of the Detroit Board of Education, a position he now holds for the third time.
- 1927 Awarded a medal and honorary degree by the University of Warsaw, Poland. This included an honorary lectureship in Military Surgery, which Colonel McLean went abroad to deliver.
- 1929 Was made a member of the Royal Army Medical Corps (England).

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column and this will be deemed by us a full compensation to those sending them. A selection will be made for review, as expedient.

DISEASES OF WOMEN. By Harry Sturgeon Crossen, Professor Emeritus of Clinical Gynecology, Washington University School of Medicine, etc., and Robert James Crossen, Instructor in Clinical Gynecology and Obstetrics, Washington University School of Medicine, etc. Eighth edition, entirely revised and reset. With 1,058 engravings, 999 pages. The C. V. Mosby Co., St. Louis, 1935.

INFANT NUTRITION. By William McKim Marriott, Professor of Pediatrics, Washington University School of Medicine. Second edition. The C. V. Mosby Co., St. Louis, 1935.

IMMUNOLOGY. By Noble Pierce Sherwood, Ph.D., M.D., Professor of Bacteriology, University of Kansas, and Pathologist of the Lawrence Memorial Hospital, Lawrence, Kansas. Illustrated, 608 pages. The C. V. Mosby Company, St. Louis, 1935.

THE PARATHYROIDS IN HEALTH AND IN DISEASE. By David H. Shelling, M.D., The Johns Hopkins University and Hospital, Baltimore. Illustrated, 335 pages. The C. V. Mosby Company, St. Louis, 1935.

CLINICAL ATLAS OF BLOOD DISEASES. By A. Prinly, M.D., M.R.C.P., and Stanley Wyard, M.D., M.R.C.P., London, England. Third edition with 38 illustrations, 34 in color. Philadelphia: P. Blakiston's Sons and Company, Inc., 1935.

The same plates appear as in the second edition inasmuch as progress in hematology has been clinical, rather than morphological. The text, however, has undergone thorough revision, so that we have a complete compendium on blood diseases. Much information in compact form.

AIDS TO MEDICINE. By James L. Livingstone, physician to Kings College Hospital, assistant physician to the Hospital for Consumption and Diseases of the Chest, Brompton, England. Fifth edition. Price, \$1.50. Baltimore: William, Wood and Company, 1935.

While these small volumes (this is one of a series) are not intended to take the place of larger works on medicine, we feel there is a place for them, since they may be conveniently slipped in one's pocket to be consulted when he is away from his medical library. The present volume on medicine has gone through five editions since it was first published in 1909. The presentation of the subject is clear and concise and thoroughly up to date.

FOR AND AGAINST DOCTORS. An anthology compiled by Robert Hutchison and G. M. Wanchope. Price \$2.00. Baltimore: William Wood and Company, 1935.

"Doctors have at all times incurred the abuse of the laity, but they have also received almost extravagant praise; censure and praise being often alike ill-deserved," opens the foreword of this little book. The contents is made up of quotations about doctors and is classified as follows: Proverbs, The Ancients, Mediaeval, Fifteenth to Seventeenth Centuries, The Eighteenth Century, The Moderns, Retrospect. The editors or selectors of the quotations have certainly succeeded in getting together, let us hope, all the petulant opinions that have ever been held against the medical profession of all ages. Perhaps the effect will be wholesome.

O' wad some Power the giftie gi'e us
To see oursel's as ithers see us!
It wad frae mony a blunder free us
An' foolish notion.

THE STOMACH AND DUODENUM. By George B. Eusterman, M.D., F.A.C.P., Head of Section in Division of Medicine, The Mayo Clinic, Professor of Medicine, The Mayo Foundation for Medical Education and Research, Graduate School, University of Minnesota; and Donald C. Balfour, M.B., M.D.(Tor.), LL.D., F.A.C.S., F.R.A.C.S., Head of Section in Division of Surgery, The Mayo Clinic, Professor of Surgery, The Mayo Foundation for Medical Education and Research, Graduate School, University of Minnesota; and Members of the Staff, The Mayo Clinic and The Mayo Foundation for Medical Education and Research, Graduate School, University of Minnesota. 958 pages with 436 illustrations. Philadelphia and London: W. B. Saunders Company, 1935. Cloth, \$10.00 net.

This work is essentially a product of the Mayo Clinic and is based upon the wealth of experience and material afforded by the institution. There are thirteen collaborators exclusive of the chief authors, Eusterman and Balfour. Almost every condition that the stomach and duodenum may be heir to is discussed in this volume. Drs. William J. and Charles H. Mayo have contributed the foreword. The reviewer naturally emphasizes those chapters in composite work which are of a more direct appeal to him. No more competent persons than Dr. Walter C. Alvarez and Dr. B. R. Kirklin could have been found to contribute chapters on Applied Physiology of the Stomach and Duodenum (Alvarez) and Roentgenologic Diagnosis (Kirklin). The work deals with both medical and surgical aspect of the subject. The volume embodies the most recent teaching and scholarly viewpoint on the subject. The illustrations are well chosen and, without exception, picture conditions that would be difficult to describe otherwise. This work will be found invaluable not only to the general practitioner but also to the gastro-enterologist.

SURGERY: QUEEN OF THE ARTS. By William D. Haggard, M.D.; F.A.C.S., D.C.L., Nashville, Tennessee. Professor of Clinical Surgery, Vanderbilt University School of Medicine; Surgeon to Vanderbilt Hospital and St. Thomas Hospital; President, Southeastern Surgical Congress; former President of the American Medical Association, the American College of Surgeons, the Inter-State Postgraduate Medical Association of North America, the Southern Surgical Association, and the Tennessee Medical Association; formerly Lieutenant-Colonel, Medical Corps, U.S.A.; Consultant in Surgery, Mesves Hospital Center, A.E.F. With Foreword by William J. Mayo. 389 pages with 41 illustrations. Philadelphia and London: W. B. Saunders Company, 1935. Cloth, \$5.50 net.

This volume consists of a collection of papers on various subjects; the title of the first paper is the title of the book. About half the papers deal with various surgical subjects. The others are on general topics such as the "Romance of Medicine," "The Seeds of Time," "What Price Health." They constitute an interesting collection of essays for leisure reading.

REGIONAL ANATOMY ADAPTED TO DISSECTION. By J. C. Hayner, B.S., M.D., Associate Professor of Anatomy, Assistant Surgeon, Flower Hospital; Assistant Visiting Surgeon, Metropolitan Hospital, New York, N. Y. 687 pp. Baltimore: Wm. Wood & Co., 1935. \$6.00.

This work is a somewhat novel approach for an anatomical text. It is probably too specialized for the introductory student, but should be of use to the more advanced medical student or practitioner desiring a small-sized reference.

Dr. Hayner's book has the regional rather than the systemic approach. It is concerned with those features of anatomy which are of clinical or surgical importance, yet it is not a surgical anatomy in the ordinary sense. It is surgical anatomy in which the surgery is omitted. Fractures, hernias and arterial anastomoses are left for the surgical texts.

The most noticeable difference between this work

and other texts is the absence of illustrations, the student being referred to the standard atlases. The reader will find the work conveniently organized according to regions. Sections and paragraphs are set off by capitals or italics, and there is a fifty-page index. There are occasional tabulations which are helpful, and descriptions, which follow the conventional pattern, are concise. This conciseness, though it might lead to ambiguity for the beginning student, will be appreciated by the practitioner.

FUNDAMENTALS OF BIOCHEMISTRY IN RELATION TO HUMAN PHYSIOLOGY. By T. R. Parsons, B.Sc. (Lond.), M.A. (Cantab.) Sidney Sussex College, Cambridge. 5th ed. 453 pp. 26 figs. Baltimore: Wm. Wood & Co.; and Cambridge, Eng.: W. Heffer & Sons, Ltd., 1935. \$3.00.

This is just the book for one desiring to review his biochemistry. It is readable and in places entertaining, yet it bears the stamp of authority which would be expected from the Cambridge laboratories. Parsons states that it has been his desire to have his book give less information than other works, rather than more. The reader will thus find the work not a repository of formulae and tabulations, but a clear cut discussion of the subject. The book is to be recommended most heartily.

CLASSIFIED ADVERTISEMENTS

FOR SALE—Complete x-ray equipment. 3 Kv. Wanz transformer. Universal table with fluoroscope; 2 Coolidge tubes; intensifying screens; developing tanks, film holders and rack, \$500.00. With new Bucky diaphragm, \$575.00. Also: 1 Sanborn metabolism machine; 1 operating table, hospital type; 1 tonsillectomy chair; instrument cabinet. Vast number of general surgical instruments. Claude V. Russell, M.D., 1207 City National Building, Lansing, Michigan. Telephone 5-8722.

MORPHINE AND OTHER DRUG ADDICTIONS—Institutional care and treatment of selected patients who have responsibilities, wish to make good and learn how to keep well; methods easy, regular, humane. Twenty-eight years' experience. Dr. Weirick's Sanitarium, Elgin, Ill.

DR. CHARTERS' MATERNITY HOSPITAL

A private hospital and home for young women desiring seclusion. Patients accepted any time during gestation. Rate reasonable.

FLUSHINGMICHIGAN

Important to Your Babies!



Larsen "Freshlike" Strained Vegetables are first quality garden fresh vegetables cooked, strained and sealed under vacuum to protect vitamins and mineral salts. For further protection we seal in special enamel lined cans.

LARSEN'S
"Freshlike"
Strained Vegetables

THE LARSEN COMPANY, Green Bay, Wis.

THE JOURNAL

OF THE

Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

Vol. 35

MARCH, 1936

No. 3

THE DIAGNOSIS OF BRAIN TUMORS*

R. W. WAGGONER, M.D.†

ANN ARBOR, MICHIGAN

Brain tumors present two types of manifestations: first, signs and symptoms of increased intracranial pressure; and, secondly, focal manifestations. It would be well if all cases of intracranial neoplasm could be diagnosed before the development of evidence of increased intracranial pressure, and I should like to emphasize the fact that absence of choked disc, or headache or of vomiting does not mean that the patient has no tumor. However, manifestations of this type frequently first tell the patient that something is not as it should be.

Let us consider first the general signs and symptoms of brain tumor which may be due directly to increase of intracranial tension:

Headaches are extremely common in brain tumor, but, unfortunately, they occur frequently in other conditions. Those associated with brain tumor, although they may occur at any time, are perhaps more commonly complained of in the morning. Such headaches, especially early in the disease, are apt to be rather sharply localized and are accentuated by straining. The patient often complains of a feeling as though there was something unusual inside the head, a pressure from within as contrasted to a feeling of constriction which rarely occurs in brain tumor. Sometimes the pain of a neoplasm is of localizing value, as, for instance, in lesions involving the gasserian ganglion or when it occurs more or less constantly in one place. Headaches occur so commonly that we must interpret their significance cautiously.

*This article is written to call to the attention of the physician the relative frequency and importance of brain tumor in general practice.

Read before the Tri-State Medical Society Meeting in Lima, Ohio, April 9, 1935.

†Dr. Waggoner graduated from the University of Michigan, obtaining his M.D. degree in 1924. He pursued post-graduate work in the University of Pennsylvania, where in 1930, he received the degree of D.Sc. He is now associate professor of neurology at the University of Michigan.

Vomiting either with or without nausea and in the absence of organic changes in the gastro-intestinal tract must be carefully evaluated. I am inclined to think we may miss cases of brain tumor in children who present so-called cyclic vomiting as their only symptom—so frequently in these cases when the diagnosis of tumor becomes manifest, it is too late for therapy. When children have frequent attacks of vomiting and at the same time show more than normal progressive enlargement of the head, the suspicion of brain tumor becomes well founded. Vomiting as a manifestation of increased intracranial tension is frequently projectile in type, and without nausea. However, we must remember that this is not always true; it occurs perhaps more commonly in lesions of the posterior fossa.

Dizziness and vertigo are symptoms which suggest the presence of an intracranial lesion. They occur in approximately 31 per cent of cases of brain tumor; of these 70 per cent are Jacksonian. Lesions of the parietal, frontal and temporal lobes are most commonly associated with convulsive attacks in the order named. Most of the Jacksonian attacks are motor or sensorimotor—few are purely sensory. About 50 per cent

of those who survive operative treatment will continue to have attacks. When convulsions begin in individuals of twenty-five years or over, who have no previous history of such attacks, one should immediately suspect a progressive cerebral lesion. These attacks may be generalized or focal, associated with unconsciousness or not, and may be sensory or motor. Oftentimes these attacks begin as a paresthesia, gradually increasing in severity and scope until the whole body may be involved in a generalized convulsion. Convulsive movements, if focal, or, as sometimes described, "Jacksonian," are among our most satisfactory localizing manifestations. When a patient presents himself with a history of headaches of increasing severity, especially when they occur in the morning, with a history of convulsive attacks, focal in children, or general or focal in adults, especially if increasing in frequency, of persistent vomiting in children, he should always be suspected of having an intracranial neoplasm.

The most important sign of increased intracranial tension is that of papilledema, a sharply circumscribed swelling of the optic nerve head. Almost 75 per cent of brain tumors are associated with papilledema sooner or later. When this choked disc is accompanied by hemorrhages it is indicative of a rapidly increasing pressure so that a choked disc with hemorrhages suggests a very rapidly progressive increase of tension, possibly with hemorrhage into a tumor. This finding must be differentiated from a very similar one seen in cases of hypertension with swelling of the disc and hemorrhages. Progressive loss of vision may be one of the earliest changes noted by the patient. The ophthalmoscopic findings are rarely of localizing significance.

Occasionally apparent mental disease is the only manifestation of a cerebral neoplasm. Those tumors having better prognosis often develop over a long period of time so that the peculiar mental reactions of such patients are taken as evidence of progressive mental deterioration. Too many of us are afraid of the problems presented by a patient who demonstrates neurologic or psychiatric deviation and as a result such patients suffer from lack of proper investigation and care. Again many of these individuals have symptoms which on the surface appear psychoneurotic, which frequently results in lack of medical service and

understanding both by the physician and the patient's relatives.

The focal signs of brain tumor are the result of interference with the function of certain areas of the brain. This may manifest itself as an evidence of stimulation such as we see in Jacksonian attacks (this is considered as release phenomena by some) or as a loss of function. Since we are fairly well acquainted with the function of various cerebral areas and with the results of disturbance of these areas, these focal signs are most important. However, we must constantly remind ourselves that the brain acts as an integrated whole and that loss of one part makes for unbalanced function of the rest.

Lesions of the Frontal Lobe

Lesions of the frontal lobe are apt to produce a series of fairly characteristic manifestations. In the prefrontal area mental changes are not uncommon. In such cases are seen euphoria, uncontrolled or uncalled for joking, so-called "Witzelsucht," and depression. We must keep in mind, however, that some mental changes, such as confusion and irritability, loss of memory, and mental deterioration, may result from lesions elsewhere in the brain. A reflex, the grasp reflex, which has been frequently described as being characteristic of the frontal lobe, does frequently occur in lesions of the prefrontal area but it may be present in lesions of the temporal lobe.

An example of this sort is the patient who was referred to the University Hospital because of a rather characteristic complaint. The patient stated that he had been feeling perfectly well and had had no headaches, no convulsive attacks of any sort, and that he was working for a warehouse concern. One day while walking downstairs carrying a rather heavy box on his left shoulder he suddenly slipped and started to fall and reached out with his right hand to save himself. He grasped a radiator with this hand and then realized that he was unable to let go and as a result suffered a rather severe burn of the hand. This is the characteristic history of the grasp reflex and it was this symptom alone that brought the patient to the hospital. He was operated upon and an astrocytoma was removed from the left frontal lobe with apparent complete recovery.

Since the motor area of the brain is in the frontal lobe, very frequently tumors of the frontal lobe produce motor manifestations. These are present in that part of the body corresponding to the area of the opposite cortex involved, so that Jacksonian attacks are not infrequent. If the lesion is entirely frontal, then these Jacksonian at-

tacks are usually purely motor and may be associated only with the twitching of a finger, of several fingers, of the hand, or even the hand and arm. Occasionally after a series of attacks have occurred the whole side of the body, including the face, may be involved. Because of the relatively large area of the motor cortex which is concerned with function of the arm and face, such attacks are more common in the arm and face than in the foot. However, they may and do occur in the foot as well. In lesions of the motor area there is almost invariably an associated increased tone of the side of the body involved, associated with muscular weakness without atrophy and with increased tendon reflexes and the so-called pyramidal signs: The Hoffmann's sign, Babinski sign, Gordon sign, etc. Again, in lesions of the under surface of the frontal lobe, or in lesions in which there is marked increase of pressure which is directed downward to involve the olfactory bulb or tract, there may be loss of smell on the side of the lesion. This is rarely noted by the patient and is usually brought out only on examination. Lesions of the frontal lobe sometimes produce changes in muscle synergy so that we may see a disintegration of movement similar to that noted in lesions of the cerebellum. In this case, however, the symptoms are on the opposite side from that of the lesion and are, of course, usually associated with other evidences of involvement of the frontal lobe.

Lesions of the parietal lobe produce primarily various types of sensory changes. These changes, however, are characteristic of cortical involvement and are manifested as so-called asternognosis, in which the patient is unable to recognize an object by its form and shape, although superficial sensation, tactile and pain are present. Loss of two point discrimination, loss of tactile discrimination and other complicated types of sensory recognition may be disturbed in lesions of this area. Likewise because of pressure downward of a lesion situated in this region there may be definite visual field changes. These changes first beginning as a homonymous quadrantanopsia eventually become a homonymous hemianopsia and are manifested in the field of the opposite side from the lesion.

The temporal lobe may show evidence of involvement by rather characteristic manifestations. In right handed individuals the

right temporal lobe is apt to be a more or less silent area and lesions here may manifest themselves not at all or only by visual field defect, such as a homonymous hemianopsia or by visual hallucinatory phenomena. If the lesion happens to be inferior or deep, pyramidal tract signs are frequently found because of pressure on the centrum semiovale and internal capsule. Again lesions forward in the temporal lobe may produce uncinat fits by pressure on the hippocampal gyrus and the uncinat region, that is, attacks associated with olfactory hallucinatory phenomena. On the left side in a right handed individual the manifestations are rather characteristic, usually manifesting themselves as some form of aphasia. If the lesion is inferior and a little posterior the aphasia is apt to be of an auditory receptive type. Whereas if it is forward near the tip of the temporal lobe, it may involve the frontal opercula, as well as the temporal, and produce a fairly clear cut expressive speech aphasia.

V. J., a woman aged 47, was transferred to the University Hospital from a State Psychopathic Hospital, where she had been hospitalized because of hallucinations. It is interesting to note that she had been transferred to the state hospital from a general hospital as an undiagnosed case.

On going into the past history it was noted that she had had severe left temporal headaches and that some four months before we saw the patient she had noticed the gradual development of pains which had become progressively more severe and it was for this that she was treated in the general hospital. There gradually developed in association with the headaches a difficulty in speech and difficulty in comprehension of written symbols. The patient recognized the fact that she was mentally confused and that during the time when mental confusion was most marked she would hear voices speaking to her. She could not recognize the source of these voices. There was a progressive decrease in vision with occasional double vision and blurring of vision, and a questionable history of generalized convulsive attacks. The speech defect was fairly characteristic of the expressive aphasia type. She had 2 to 3 diopters of choked disc with some hemorrhage and bilateral weakness of the 6th nerve. There was weakness of the right side of the face.

A diagnosis of left fronto-temporal neoplasm was made and the patient was operated on with removal of the tumor.

Pyramidal tract signs and visual field changes may occur on this side as well as on the right side and, of course, in left handed individuals the reverse of some of the above statements is true. In lesions, particularly of the temporal lobe, one is not infrequently faced by false localizing signs, that is, manifestations of a lesion on the

same side of the body as the tumor occurs in the brain. This usually is the result of a lesion low down in the parietal area and/or far back in the temporal area, which by gradual increase of pressure pushes the brain stem against the unyielding incisura and compresses the conduction pathways, and thus involves the fibers coming down from the opposite side of the brain. The possibility of this mechanism should always be kept in mind. Mental symptoms may also be manifested in temporal lobe lesions as, for example, the following case.

H. G., aged fifty-five, was admitted to the University Hospital on December 13, 1933. At that time the history from the patient was of no value. She was unable to give a consistent story of her disturbance. The husband, however, stated that he brought her to the hospital because she was losing her mind. He stated that eight or nine years before she had had a sudden convulsive seizure associated with both tonic and clonic movements and followed by a period of drowsiness. Since that time she had had such attacks occurring at intervals of from two to six months. These attacks were preceded by an aura so that the patient would have time to lie down to protect herself from injury during the attack. About a year after the onset of her symptoms she complained of pain in the right upper quadrant and as a result had her gall bladder removed. Following this treatment, she had no attacks for a year. About a year before admission the patient had taken some patent medicine for the treatment of epilepsy and following the taking of this medicine her spells became much less frequent but she became mentally deteriorated. During the two or three months before admission, she was totally incontinent, had rather frequent dizzy spells and some rather mild headaches. Her past history, aside from the operation for gall bladder disease, was more or less irrelevant.

At the time of her admission she was disoriented, irrational, made frequent irrelevant statements, showed no knowledge of her surroundings and had no insight into her condition. She was very uncooperative and it was difficult to test her for such things as speech defect. Sensory examination was of no value. Examination of the fundus showed some blurring of the disc. There was a suggestive Hoffmann's sign on the right, a little more tone in the right side of the body than in the left and a suggestive Chaddock and Babinski sign on the right. These findings, of course, would suggest a lesion on the left side of the brain. An x-ray of the skull was made which showed a calcification on the left temporal lobe with some shift of the calcified choroid plexus to the right. On this basis, a craniotomy was done, at which time a meningioma was removed and within a few days her mental condition had cleared up remarkably. She was no longer incontinent and within three weeks she was discharged from the hospital apparently in good condition. Since that time there has been no recurrence of her cerebral manifestations. This, then, is the story of a case which might well have been diagnosed as early senile dementia or as showing the mental symptoms of a severe cerebral arteriosclerosis, and, incidentally, she was so diagnosed by the intern at the time of admission to the hospital, although this intern was on the neurological service. The removal of her tumor entirely cleared up her mental manifestations.

In lesions of the occipital lobe the most commonly occurring manifestation is that of visual field defect and perhaps the most common symptom is that of visual hallucinations. The visual field defect and the hallucinatory phenomena are projected to the opposite side. In a lesion which involves the convex surface of the occipital lobe it is not uncommon to have a type of aphasia known as visual receptive aphasia or alexia, that is, the inability to recognize written or printed symbols.

Tumors of the cerebellum are characterized by a decomposition of movement, that is, the patient lacks the ability to synergize and coordinate his muscular activities and as a result his movements gradually become more and more ataxic. Several tests are, of course, designed to bring out these manifestations, such as the diadokokinesis test, in which the patient is asked to alternately pronate and supinate the hands at the same time. If the lesion involves one or both sides it is manifested by an inability or difficulty in carrying out this movement on the side involved. Another test for cerebellar dysfunction is the so-called Holmes' rebound sign in which the patient attempts to move a muscle against resistance. If the resistance is suddenly released the patient does not catch his muscular contraction and as a result the extremity for a fraction of a second goes out of control, whereas the normal individual will allow the extremity to move hardly at all after the resistance is removed. Cerebellar lesions are also very commonly associated with a nystagmus which may be either lateral or vertical. If the nystagmus is vertical the lesion is apt to be rather higher up than in the cerebellar hemisphere, involving probably the vermis or the fourth ventricle region; and with lesions slightly higher than this, that is involving the aqueduct region and region of the pineal gland, there is apt to be also an associated loss of upward gaze. Lesions of the cerebellum are also associated not uncommonly with cranial nerve involvement due to the close proximity of the cranial nerve nuclei in the brain stem.

One of the most widely discussed and perhaps less to be trusted than any other sign is that of aphasia. It is certainly true that in the so-called dominant hemisphere there is likely to be an aphasic zone. This zone includes the posterior and inferior part of the frontal lobe, the inferior portion of

the parietal lobe, particularly in the region of the supramarginal and angular gyri, and the superior part of the temporal lobe. It seems to me that the classification proposed by Weisenburg for this symptom is the most satisfactory yet evolved and is likewise the simplest.

Tumors of the third ventricle produce symptoms primarily by increase of intracranial pressure because of the loss of flow of cerebral spinal fluid. A rather characteristic symptom of these cases, which is extremely difficult to explain, is that of the sudden attacks of headache associated with these lesions when the patient makes sudden movements of the head. The most commonly accepted explanation of this manifestation is that the neoplasm acts as a ball valve and blocks the flow of fluid from the posterior portion of the third ventricle. Personally, I am unable to accept this explanation as being entirely satisfactory. Frequently the third ventricle is dilated, which results in pressure in the region of the sella turcica and so produces symptoms and signs of involvement of the pituitary region. Thus the patient may show adiposity, diabetes insipidus and sometimes genital dystrophy. As a matter of fact, lesions blocking the flow of cerebrospinal fluid even as far back as the fourth ventricle frequently cause a marked increase in size of the third ventricle, with the symptoms of a lesion in the region of the pituitary, so that not only may such lesions therefore produce erosion of the pituitary fossa but also a bitemporal hemianopsia so commonly associated with pituitary lesions. Marked somnolence is of rather common occurrence in these cases.

In the differential diagnosis of brain tumor from various conditions, certain important ones must be considered. Syphilis frequently produces manifestations associated with evidence of intracranial involvement. In these cases specific evidence of lues, Argyll-Robertson pupils, the history of infection and serologic examination may serve to make the differential diagnosis clear, especially in the absence of choked disc and a definite focal manifestation. However, it should be kept in mind that brain tumors can occur in the presence of syphilis and that just because a patient has syphilis we cannot discount the possibility of tumor, since they not infrequently occur together. In such cases, if the brain tumor is not producing too serious manifestations, the syph-

ilis should be treated first, followed by treatment of the neoplasm.

Brain abscesses are in fact a kind of brain tumor. However, they should be differentiated from a neoplastic growth. In these cases one should be able to obtain a history of trauma or of an infectious process which may serve as the source of infection. Middle ear disease, mastoid disease, or disease of the nasal sinuses may, of course, serve as the most important source of such infections. I have seen one case of trauma with fracture of the skull which turned up at the hospital seventeen years later with a well walled off, aseptic brain abscess.

Subdural hematoma, or, as it is sometimes called, internal hemorrhagic pachymeningitis, oftentimes produces signs and symptoms clinically indistinguishable from those of brain tumor. In these cases the history of trauma with the development of symptoms from two weeks to three or four months following the injury is significant. If the patient has definite focal signs, such as would suggest a neoplasm, the treatment is the same as that for neoplasm; namely, operation, and so from a practical standpoint subdural hematoma may be considered as a brain tumor.

Cerebral vascular disease, especially arteriosclerosis, is perhaps one of the more important types of disease to differentiate from brain tumor. In these cases, of course, the mode of development of symptoms, the age of the patient, the presence of retinal arteriosclerosis, the absence of evidence of increased intracranial pressure, aid us in differentiating the two conditions. It is frequently, however, a very difficult problem to differentiate these conditions because we must keep in mind that cerebral arteriosclerosis may be associated with, for example, thrombosis or hemorrhage, which produces a hemiparesis or hemiplegia which may be progressive and in such cases give us definite focal signs which suggest the presence of a neoplasm. We must also keep in mind the fact that cerebral neoplasms are not necessarily associated with headache or with definite evidence of increased intracranial pressure.

Finally, encephalitis of various types must be differentiated from brain tumor. In this condition the history, the frequent dissociation of extraocular movements, and sometimes the changes in the spinal fluid, will serve to differentiate this condition for us.

Usually this differential diagnosis is not so difficult.

All too frequently perhaps we must take advantage of special technic necessary to make our diagnosis. An interesting study has been recently made by one of our roentgenologists in going over a fairly large series of tumor cases. In this group 55 per cent were properly localized by clinical examination alone. This, of course, does not include the presumptive localizing diagnosis nor the diagnosis of brain tumor without localization. Routine x-rays of the skull in cases suspected of having brain tumor served to localize the neoplasm in 23 per cent of cases. A ventriculogram in these cases of presumably positive diagnosis of brain tumor, but in whom the localization was not positive, aided in 87 per cent of the cases with proper localization. Encephalography, which is done, as you know, less frequently in cases of neoplasm, served to properly localize the lesion in 66 per cent of those cases in which it was used. Obviously all cases of suspected brain tumor should have a routine x-ray of the skull and if one suspects a lesion of the posterior fossa, particularly a lesion of the cerebello-pontile angle, detailed studies of the petrous ridges should be made. If we are still without positive localizing evidence we must consider ventriculography or encephalography. In those cases in which the pressure is not too

great and the diagnosis of tumor itself may be in some doubt, and we do not suspect a lesion of the posterior fossa, I believe encephalography to be the procedure of choice. In the remaining cases where air injection is necessary ventriculography should be used. Various other types of cerebral localization technics have been suggested; for example, the injection of a radio-opaque medium into the carotid with a prompt x-ray of the skull, so-called arterial encephalography. These procedures, however, at the present time are not generally accepted.

Finally, we must consider the treatment of brain tumor. Obviously two forms of treatment are open to us, operation or radiotherapy, or both in combination. Certain tumors are inoperable and if possible the diagnosis of an inoperable tumor should be made before operation so that the patient will not be subjected to the unpleasantness of an operation. Many types of tumor are susceptible to neither operation nor x-ray therapy, and in these cases, for the relief of the immediate distress, a decompression may be done if necessary. This in itself is likely to result in a great deal of unpleasantness for the patient. In some cases following surgical removal of the tumor, x-ray therapy is given in addition. Whether it is of value or not I am unable to say. In some cases apparently it has had a beneficial effect.

THE MICHIGAN STATE MEDICAL SOCIETY—A REVIEW

HENRY COOK, M.D.†

FLINT, MICHIGAN

Over seventy years ago the medical profession of the State of Michigan banded themselves together and formed the Michigan State Medical Society. The motive for their action was two-fold: First, that they might improve themselves in their chosen profession and better serve the public; and secondly, that their interests, as a profession, might be enhanced through organization.

The Society has always been made up of its component County Medical Societies, and for a great many years the best work and the greatest result was accomplished through the activities of the County Society. Means of transportation and means of communication have now brought the profession so much closer together that it is actually as easy to cross the state now as it was a county thirty-five years ago. As a result of these changed conditions a stronger state organi-

zation has developed and now the individual doctor is looking to the organization of the State Medical Society to solve his many problems, sometimes, I feel, without first endeavoring to solve them through the County Society.

After being connected with the State organization in an active capacity for approximately ten years, I sometimes doubt the

†Dr. Cook, chairman of the Council of the Michigan State Medical Society and for the past ten years a member of the Council, delivered this address before the senior group of physicians at the noon luncheon at the Wayne County Medical Society, January 15, 1936.

ability of a State Society to solve local problems, since various local problems differ in each locality. I can say most truthfully that during all of this time better medical and surgical preparation and better service to the public have been the foremost aim of our State and County Societies as well as of our profession.

The duties of the State organization—I mean the officers of the State Medical Society—were for a great many years largely administrative of the business of the Society. They endeavored to develop proper legislation, to protect the profession from dangerous legislation which was equally and more dangerous to the public welfare, and to develop educational programs through County meetings. A part time Medical Secretary had been employed all during this time. For a short time a lay Secretary was employed to develop district clinical conferences. His services were dispensed with after about two years. The work was carried on by the Council through the coöperation of the committee on Post Graduate Education together with the department of Post Graduate Education of the University of Michigan. These district conferences were abandoned a few years ago and now we conduct Post Graduate courses in various centers through the state, with all of which you are familiar. Various other committees have become more and more active; more and more committees have been appointed until we now have fourteen, with important duties assigned to each. In the last four years many economic problems have arisen. It is unnecessary to enumerate them; unfortunately, you know all about them. The complexity and importance of these problems impress me more and more with the need of a better organized and a more efficient society.

The House of Delegates at the Soo meeting in 1935 instructed the Council to move the executive offices of the State Medical Society to Lansing and to employ a full time Executive Secretary, maintaining the Medical Secretary on a part time basis. Mr. Wm. J. Burns was employed as Executive Secretary and is doing a very fine job, co-operating with Dr. C. T. Ekelund, the Medical Secretary.

I see in this a danger that our local profession and local County Medical Societies will still expect far more of our State organization and still further feel that the

State Society should solve their problems.

If this is true, then it seems important to me that we might take inventory of ourselves and study out how we might improve our organization to better serve the public and the profession. And again I wish to repeat, we have no right to seek to take care of our own interests alone without giving full measure of consideration to the public welfare. As I view the situation the most efficient organization and the best results will only be obtained when each individual member of the County Society, each officer of the County Society and of the State organization through its officers, are meeting their full responsibility.

I shall first attempt to discuss what the County Society can do. It should have officers who are elected because of their ability to stimulate, direct and execute a well rounded out program for their County Society along the following lines:

First: A scientific program with good speakers on appropriate subjects well diversified in order that professional knowledge shall be improved, and furnish to the public the best quality of medical service.

Second: Social programs which will develop good fellowship and foster a good feeling among the profession that they will better work together.

Third: An economic program, studying the doctor's own problems locally and doing their best to solve them. If *their* problems are such as require help from the State Society, *they* should not hesitate to ask assistance and it should be given forthwith. The County Society should pass along its experiences, its problems, the solution of the problems to the State organization through Mr. Burns in the office at Lansing. He may be able to give *them* help based upon the experience of other County Societies. A County Society can help other County Societies by giving them their experiences.

The County Society should always insist upon a free choice of physician, allowing no one to interfere with the family physician-patient relationship. While there are many sick and afflicted who are entitled to medical care through public funds, it is our responsibility to see that they obtain it, and it is our duty to see that no one not rightfully entitled to care from public funds shall receive it. If we do that we will protect the taxpayers and preserve our private patients.

Problems, as I have stated, vary greatly in different communities. In certain of the larger centers there is the problem of the hospital, the practice of medicine by hospitals through internes and the staff, the hospital organization imposing upon the staff members without pay and being unfair to the profession not upon its staff. There are industrial organizations stepping outside of their field by caring for the sick who are non-compensable cases. There is the problem of the county physician who does not always confine his work to those who justly come under his care. County health units step over, all too frequently, into the field of treatment. Since the Afflicted Child Act has been passed there are a great many children being taken care of under the Act whose parents can well afford to care for them. Relief medicine is being demanded of the physician, with partial pay. WPA workers are not paid sufficient to pay for proper medical care. We have a right to expect, and should demand, that all Health programs in our community are fair and worthy of our coöperation. Health Departments have a right to expect our coöperation upon that basis. We should oppose any other type of Health work.

Confirming what I have just said the Surgeon General in his memorandum at the Conference of the State and Territorial Health Officers with the U. S. Public Health Service on June 17, 1935, stated in part:

"The basis of a satisfactory local health service is a well organized Health Department, adequately financed, with trained personnel, supported by suitable laws and ordinances, by favorable public opinion and by all professional groups."

All of these problems which I have enumerated are also problems of the smaller County Societies, in part at least. Some counties do not have hospitals; all of the other problems are applicable to them.

Let me further discuss this matter of hospital practice which is extremely serious and important to the medical profession and the public. Some hospitals, I believe the majority, are extremely fair in their dealings with the medical profession and consider themselves as institutions in which the doctor may carry on his practice and, if anything develops in connection with the relationship to the profession which is contrary to the interest and desire of the doctor, are quick to correct it. Other hospitals have free dispensaries which act as feeders to the

hospital, disregarding the interest of the physician to a more or less degree and to a great extent the interest of the patient and the taxpayer, imposing upon its staff members who act without pay, and upon public funds after the patient is admitted to the hospital, charging for that medical service which is nothing but corporation practice, and in many communities tending to split the ranks of the profession because, if a member of a staff supports his County Society in an effort to correct these conditions, he will endanger his position upon the staff. I am very happy to know, however, that there are many members of the profession who have the courage of lions and are willing to stand up for what they know is right. This is a Gordian Knot which should receive our immediate attention. It can only be untied through local County Society organization and its members presenting a united front in their effort to solve it. If these staff members were to insist that they be paid for their services, and if no physician would serve without pay, it would help a great deal to solve the problem. They should be paid for both dispensary and hospital staff practice. The hospitals receive pay for their services.

Let me point out another danger in the attitude of this unfriendly hospital group. They are very influential in the State organization and are assisting in the determination of the policy of the State organization to a great extent. Their attitude in these matters is endangering the relationship between the medical profession and the fair-minded hospital group. It might lead to a more serious situation in the future than exists at present. They have, as I have previously pointed out, to a certain degree at least, developed a division of loyalty in the medical profession. Neither of these situations can continue to exist and their efforts must be defeated.

I have enumerated some problems as I see them in the various communities. You will agree with me that the initiation of the solution of some of these problems is local. I believe you will also claim, and I agree with you, that you must have the coöperation of the whole profession all over the state, through its State Society, in final efforts to solve the problem.

There is no practice of medicine done in Michigan in, by or through any institution, whether it be Hospital, Medical Relief or

in coöperation with Health Departments, which is not worthy of a reasonable, fair pay to the purveyors of that service, and it is the duty of the united profession to see that that pay is forthcoming. Active work by our County Medical Societies will be of the greatest assistance in bringing this about.

That then brings us to the function of the State organization. The State organization should develop ideas and problems received from the County Society through its proper committees; should also develop ideas which are born in the State Society's committees itself, or ideas from any other source. It should coöperate with all organizations, lay or medical, whose activity is related to the work of our profession. It should advise and direct them in proper channels. It should develop in them the confidence that they can accomplish most if they play fair with the medical profession and have the coöperation of our profession; it should let them know they will not go far without it. It should study legislative enactments, legislative trends, attempting both to direct and assist in proper tendencies and to prevent legislation contrary to public welfare. It should study the economic problems of the public and the profession so that it may know the facts in order to talk intelligently and be prepared to meet whatever problem may arise. Let me point out four subcommittees of the Economic Committee which were just appointed and whose names will indicate the lines along which they are working:

1. Postgraduate Education
2. Medical Relief
3. Industrial Medicine
4. Hospital Insurance

The Subcommittee on Relief Medicine is making a survey of fees of the SERA special services, a survey of cost of the Afflicted and Crippled Child Act, cost and problem of the afflicted adult relief in the state. All of this information will be very useful in our work in connection with these problems.

The Michigan State Medical Society must ever be doing all possible to improve the individual physician because, after all, our future, as a profession, is most dependent upon how we serve the public. Everything

must be judged through the gauge of *quality of service*. Then and only then can we demand confidence and proper remuneration. This must be done through a Post Graduate Education program. Our Preventive Medicine program must be done in coöperation with the State Department of Health and the State Department of Health needs our coöperation in their problems.

The Committee on Hospital Insurance is making a study of this problem in order that it may be able to meet the problem as it seems advisable when the proper time comes.

Industrial Medicine is another problem which is very likely to face the profession in the very near future, and study on this subject is also important.

A proper legislative program must be developed which is sane and sensible and in the interest of the public, first, because the interests of the physician will best be served thereby; and secondly, it will have a much better chance of success. The State Society should be encouraging scientific research and developing public interest in that problem. The State Society organization must make proper contacts with the public and its officials, such as the Governor, the Relief Administrator of the state, and local administrators, legislators and all other public officials. We should interest ourselves locally and as a State organization in the election of proper officers. Let them know we are interested and watch their attitude toward our problems, and the fairness and honesty of their purpose.

These are a few of the problems which have been considered and should be developed by proper reference committees. When they have been approved it shall be the duty of the Council to see that they are effected through the proper committee of the State Society.

In conclusion, all of this work must be done through a united medical profession which shall act through its County Medical Society, through its State Society and the committees of the State Medical Society. Let me impress upon you that this State Medical Society is made up of the doctors, one of whom is YOU.

AN ANALYSIS OF VISUAL FINDINGS IN SUBNORMAL INDIVIDUALS

HARVEY E. DOWLING, M.D.

DETROIT, MICHIGAN

During a period of forty-two months, all the individuals of the Wayne County Training School whose vision was 20/30 or less, or who complained of eye strain or unexplained headaches, were refracted. These individuals are all of a subnormal rating in intelligence, and so presented more than the usual difficulty in obtaining accurate data on their refractive status:

The average age of the individuals in this group was 12.88 years. The youngest of the group was seven years, and the oldest individual was forty-one years. Only four of the number were over twenty-three years of age.

The great majority of the pupils in the school have an intelligence quotient between 60 and 80. The aim of the school is to train these individuals to such a degree as to allow them to return to the community as self-supporting citizens.

The routine procedure at the school is, on admission, to have the vision taken when the physical examination is made. If the vision is less than 20/30, the individual is later seen by myself, and if any eye strain is evident, the individual is refracted, using homatropine as a mydriatic. In some cases it has been necessary to repeat the refraction using atropine, before a satisfactory result has been obtained.

In the analysis of these findings, the percentages of the New York compensation laws were used.

Total number of patients refracted	440
Total number of eyes refracted.....	.880
Number of patients whose vision was brought to normal (20/20) 324 (73.63 per cent)	
Number of eyes whose vision was brought to normal (20/20)....	.694 (79.09 per cent)
Average improvement of vision in each eye, when the total number of eyes refracted was included	15.11 per cent
Average improvement of vision in each eye, when only those eyes in which improvement was obtained were included.....	18.00 per cent
Number of eyes in which improvement was obtained.....	.739 (83.97 per cent)
Number of eyes in which no improvement was obtained.....	.141 (16.02 per cent)

The largest number of refractive errors fell in the hyperopic group, with a total of 512 eyes. This gives a percentage of 58.18. Of this number, 301 had less than one diopter of hyperopia; 113 had an error between 1.00 D. and 1.87 D., inclusive; thirty-seven

had an error between 2.00 D. and 2.87 D., inclusive; twenty-two had an error between 3.00 D. and 3.87 D., inclusive; twenty-five had an error between 4.00 D. and 4.87 D., inclusive; nine had an error between 5.00 D. and 5.87 D., inclusive; and five had an error between 6.00 D. and 6.87 D., inclusive. Table I gives the details of the amount of the refractive error and the age groups.

The next largest group of refractive errors fell under the hyperopic astigmatic type, with a total of 508 eyes. This gives a percentage of 57.72. Of this number 245 had an astigmatic error of less than 0.50 D.; 151 had a hyperopic astigmatic error between 0.50 D. and 0.87 D. inclusive; fifty-nine had an error between 1.00 D. and 1.37 D. of hyperopic astigmatism; fifteen had an error between 1.50 D. and 1.87 D. of hyperopic astigmatism; twelve had an error between 2.00 D. and 2.37 D. of hyperopic astigmatism; eight had an error between 2.50 D. and 2.87 D. of hyperopic astigmatism; eleven had a hyperopic astigmatic error between 3.00 D. and 3.37 D., inclusive; six had an error between 3.50 D. and 3.87 D. of hyperopic astigmatism, inclusive; four had a hyperopic astigmatic error between 4.00 D. and 4.37 D., inclusive. Table II shows the details of the hyperopic astigmatic errors with the age groups, totals and percentages.

The third largest number of refractive errors fell under the myopic group, with a total of 131 eyes. This gives a percentage of 14.88. Of this number fifty-eight had a myopic error between 0.00 D. and 0.87 D., inclusive; forty-two had a myopic error between 1.00 D. and 1.87 D., inclusive; six had a myopic error between 2.00 D. and

VISUAL FINDINGS IN SUBNORMAL INDIVIDUALS—DOWLING

TABLE I. AGE GROUPS AND THE AMOUNT OF HYPEROPIC REFRACTIVE ERROR

Age	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	23	25	26	37	Total	Per cent
0.00-0.87 D.*			8	8	21	22	26	35	49	31	35	26	7	15	8	4	2	2	2	301	34.2
1.00-1.87 D.	1	2	8	9	7	15	15	23	13	8	7	1	2	1		1				113	12.84
2.00-2.87 D.	1		1	3	1	3	5	4	10	3	5					1				37	4.2
3.00-3.87 D.					3		4	5	3	2	1	1		3						22	2.5
4.00-4.87 D.	1			1	3	2	2	1	9		1		2	1	2					25	2.84
5.00-5.87 D.	1		2	1	1		1		1			2								9	1.02
6.00-6.87 D.							1	4												5	0.568
Total	4	2	19	22	36	42	54	72	85	44	49	30	11	20	10	6	2	2	2	512	58.18

*All diopter units are inclusive.

TABLE II. AGE GROUPS AND THE AMOUNT OF THE HYPEROPIC ASTIGMATIC REFRACTIVE ERROR

Age	7	9	10	11	12	13	14	15	16	17	18	19	20	21	23	25	26	37	Total	Per cent
0.00-0.37 D.*	1	4	6	19	18	25	34	35	27	27	18	6	10	5	4	2	2	2	245	27.84
0.50-0.87 D.	1	5	7	9	8	11	28	21	16	18	14	2	5	3	3				151	17.15
1.00-1.37 D.	2	3	3	4	5	4	9	12	4	3	3	2	1	1	1		2		59	6.70
1.50-1.87 D.			1	1	3	2	2	3	1	1			1						15	1.70
2.00-2.37 D.					2	3	1		2	1	1		2						12	1.36
2.50-2.87 D.			2	1		1	2				2								8	0.90
3.00-3.37 D.				1	1		3	2	3		1								11	1.25
3.50-3.87 D.				1	1	2	1		1										6	0.68
4.00-4.50 D.				1			1												2	0.22
Total	4	19	21	37	40	50	75	77	49	53	35	10	19	9	8	2	4	2	509	57.89

*All diopter units are inclusive.

TABLE III. AGE GROUPS AND THE AMOUNT OF MYOPIC REFRACTIVE ERROR

Age	10	12	13	14	15	16	17	18	19	20	21	22	25	Total	Per cent
0.00-0.87 D.*	1		6	9	15	10	2		9	4		2		58	6.59
1.00-1.87 D.	1	2	5	5	5	6	5	6	1		2	2	2	42	4.77
2.00-2.87 D.		1	1	1	2			1						6	0.68
3.00-3.87 D.				1	1			2	4					8	0.90
4.00-4.87 D.			1	1	1			2		1				6	0.68
5.00-5.87 D.								1	2					3	0.34
6.00-6.87 D.		1												1	0.11
7.00-7.87 D.						1	2							3	0.34
8.00-8.87 D.			1					1						2	0.22
9.00-9.87 D.								1		1				2	0.22
Total	4	4	13	17	24	18	9	12	16	6	2	4	2	131	14.88

*All diopter units are inclusive.

VISUAL FINDINGS IN SUBNORMAL INDIVIDUALS—DOWLING

TABLE IV. AGE GROUPS, AND THE AMOUNT OF MYOPIC ASTIGMATIC ERROR

Age	10	12	13	14	15	16	17	18	19	20	21	22	25	Total	Per cent
0.00-0.37 D.*			1	9	11	12	4		3	5	4		1	52	5.90
0.50-0.87 D.	2	2	2	4	5	1	6	1	3			2	1	27	3.06
1.00-1.37 D.					1	2	2	2	2			1	2	12	1.36
1.50-1.87 D.			2		3				2	1				8	0.90
2.00-2.37 D.										1				1	0.11
2.50-2.87 D.								1						1	0.11
3.00-3.37 D.								1						1	0.11
3.50-3.87 D.									1					1	0.11
Total	2	5	11	18	18	7	8	8	13	6	3	4	2	103	11.70

*All diopter units are inclusive.

TABLE V. AGE GROUPING AND AMOUNT OF MIXED ASTIGMATIC ERROR

Age	11	12	13	14	15	16	17	18	19	21	41	Total	Per cent
Mixed astigmatism	2	5	4	3	7	5	7	3	3	4	2	45	5.11

2.87 D., inclusive; eight had a myopic error between 3.00 D. and 3.87 D., inclusive; six had a myopic error between 4.00 D. and 4.87 D., inclusive; three had a myopic error between 5.00 D. and 5.87 D., inclusive; one had a myopic error between 6.00 D. and 6.87 D., inclusive; three had a myopic error between 7.00 D. and 7.87 D., inclusive; two had a myopic error between 8.00 D. and 8.87 D., inclusive; two had a myopic error between 9.00 D. and 9.87 D., inclusive. Table III shows the age groups, with the totals, and percentages.

The fourth largest number of refractive errors was the myopic astigmatic group, of which there were 103 eyes. This gives a percentage of 11.70. Of this number fifty-two had a myopic astigmatic error of less than 0.50 D. Twenty-seven had a myopic astigmatic error between 0.50 D. and 0.87 D., inclusive; twelve had an error between 1.00 D. and 1.37 D. of myopic astigmatism; eight had a myopic astigmatic error between 1.50 D., and 1.87 D., inclusive; one had an error between 2.00 D. and 2.37 D. of myopic astigmatism; one had a myopic astigmatic error between 2.50 D. and 2.87 D., inclusive; one had an error between 3.00 D. and 3.37 D. of myopic astigmatism; one had a myopic astigmatic error between 3.50 D. and 3.87 D., inclusive. Table IV shows the age groups, with the totals and percentages.

The smallest group of refractive errors fell under the classification of mixed astigmatic errors. The age groups ranged from ten years to forty-one years. The total number of eyes in this group was forty-five. This gives a percentage of 5.11. Table V gives the age grouping, total and percentage.

The various pathological conditions which were found in these cases at the school were very interesting. There were thirteen cases of convergence insufficiency, all of which improved to well within normal limits under treatment. A number of these patients had very definite reading disabilities, and improved rapidly in reading as the muscle imbalance was corrected.

Seven cases were classed as amblyopia ex anopsia. Various efforts are being made to get an improvement in vision in these cases. Only one case of retinal degeneration was seen in this group. One case of marked exophthalmos was found. This girl had a severe exophthalmic goiter and had been operated on. A subtotal thyroidectomy had been done; all her symptoms disappeared except the exophthalmos, which has remained the same over a period five years.

Eleven patients with convergent strabismus were examined. The majority of these had a marked degree of amblyopia, in the squinting eye, and our efforts up to the present have been toward a restoration of the

visual acuity of the amblyopic eyes. One boy had an injury to his eye that resulted in practically a blind eye. Another eye was destroyed by a severe panophthalmitis following an attack of one of the acute exanthemata. One very persistent case of conjunctivitis has been with us for some time; so far our most successful treatment has been the use of citrus fruit juices in the conjunctival sac.

Two cases of chorio-retinitis were discovered, with extensive destruction in the retinal tissue in one case, and only a slight amount of destruction in the other case. Only one case which was classed as a toxic amblyopia was seen in this group. One boy had one naso-lacrimal sac removed due to chronic infection and stenosis. Optic atrophy was diagnosed in one case. One case was seen which had a weakness of accommodation. This condition cleared up gradually as the general health of the patient improved. Two cases of hyperphoria, sufficient to cause symptoms, were corrected by prisms. One classical example of rupture of the choroid was discovered. One case of severe nystagmus in an albino has been watched for the entire time, and one rather interesting case of posterior staphyloma, has been followed for some time. Thus forty-six cases of pathology were found in the group examined.

In this series of examinations 58.18 per cent were hyperopic. The largest number (301, or 34.2 per cent) had less than 1 diopter of error. Over 46 per cent had less than 2 diopters of error. Lawson of London found that 44 per cent of all children over seven years were hyperopic. In Ball's Mod-

ern Ophthalmology the statement is made that the majority of hyperopic patients have an average error between 2 and 5 diopters. Cases of 6 to 8 diopters are rare. This series agrees fairly well inasmuch as only fourteen eyes had over 5 diopters of error.

Of the total number of eyes 57.89 per cent showed some hyperopic astigmatic error. Very few cases of hyperopia were found in which no astigmatic error was found. This bears out the general impression of the prevalence of astigmatic error in hyperopic eyes. We found a larger number of high astigmatic error in this series than is usually reported. Several authorities state that errors of astigmatism of 4 to 6 diopters are rare. In this series thirty-nine eyes were found that had an astigmatic error over 4 diopters.

The percentage of myopic errors in this group was 14.88, which is lower than the figures given by Risley. He states that at seventeen and one-half years 19.33 per cent were myopic. The number of myopic errors over 6 diopters is possibly higher than the average in other reports.

Only 11.70 per cent of eyes were found to have a myopic astigmatic error. This gives a far larger number of myopes in which no astigmatic error was found, than among the hyperopic group.

The group of mixed astigmatic errors comprised 5.11 per cent of the total group.

From an examination of this series, the conclusion that the visual findings of the subnormal individual runs a very close parallel to that of the normal average individual, seems warranted.

Colonic Irrigation

Frank Hammond Krusen, Rochester, Minn. (*Journal A. M. A.*, Jan. 11, 1936), defines colonic irrigation as lavage of the large intestine. Colonic irrigation is not to be considered as a massive enema but as a lavage of the colon above the area of defecation, administered under low pressure so that the defecation reflex is not stimulated. One must also consider that in conjunction with the lavage there are possibly other factors present (such as pressure, temperature, motion and osmosis) which may act to influence normal and disturbed physiologic processes in the gastro-intestinal tract. Copious amounts of fluid are usually employed. Antiseptic solutions or solutions which tend to acidify or alkalize the colonic contents are of little or no value. Tap water or physiologic solution of sodium chloride seem, as a rule, more satisfactory. The

term "high colonic irrigation" should be abandoned. The attempt to introduce a long stiff tube into the cecum is dangerous and usually fails, the tube coiling in the rectum. If the tube is introduced only three or four inches, under ordinary conditions the fluid will reach the cecum in from two to five minutes anyway. Elaborate apparatus is not necessary for the administration of colonic irrigations. Colonic irrigations have been greatly exploited by charlatans, ignorant lay persons and, most unfortunately of all, by men within the medical profession. The oft-repeated or routine administration of colonic irrigation is to be strongly deprecated. Whereas an occasional series of colonic irrigations may be indicated for the treatment of unfavorable conditions within the intestinal canal, as for example at times in arthritis, or for the removal of retained fecal material from the colon, such indications are relatively infrequent.

THE INJECTION TREATMENT OF CYSTIC ENLARGEMENTS OF THE SCROTUM: HYDROCELE AND SPERMATOCELE*

WALTER A. KEITZER, M.D.

ANN ARBOR, MICHIGAN

Hydrocele and spermatocele are common physical findings, but are seldom considered of much clinical importance. However, there are some patients who object to the large bulk caused by cystic enlargement of the scrotum and request treatment. Many more would seek treatment if the time and expense of an operation could be avoided.

The method of injection treatment did not become really practical until Pybus,⁹ in 1930, used quinine hydrochloride and urethane in five cases of hydrocele, and Porritt⁷ and Levi⁶ used sodium morrhuate in thirty cases, all obtaining excellent results. In 1932, Kilbourne and Murray⁵ attempted to find a solution for the injection of hydrocele which would avoid pain, would make it unnecessary for the patient to stop work while under treatment, would not be excessively toxic, and would be bactericidal in order to avoid infection. They concluded that quinine hydrochloride, 13.33 per cent, with urethane, 6.66 per cent, was the ideal solution. We fully agree with this and have abandoned sodium morrhuate because of the pain it produces. Floyd and Pittmann³ reported twenty-four cases of which the majority were treated with 5 per cent sodium morrhuate, with ten patients treated for more than a year with good results and no complications. Ewell, Sargent and Marquardt² recently reported forty-six cases injected with quinine hydrochloride and urethane, with encouraging results.

The literature pertaining to the injection treatment of spermatocele has been scanty. Porritt⁸ mentioned that it could be used in the treatment. We have had sufficient experience with the injection of spermatoceles to realize the possibilities and limitations of the method. Injection is superior to operative treatment in selected cases. The latter method often requires a partial epididymectomy in order entirely to remove the sac and it is very prone to recur if not completely removed (Campbell¹). X-ray therapy following aspiration requires complete sterilization of the testicle in order to effect a cure and, therefore, should be confined to the aged.

How the injection of sclerosing solutions effects a cure, is not known. Ewell, et al.,² reports on an operated case cured by injection

tion and states that the sac was not obliterated, the endothelium was intact, and fibrosis had occurred within the submucosa. This would tend to support the theory of absorption of the sclerosing solution producing chemical inflammatory fibrosis of absorbing and secreting elements, i.e., the lymphatics.

Indications

The indications for the injection treatment of hydrocele are confined to the simple, chronic, non-infected type. A congenital hydrocele that does not respond to simple tapping may be injected. Hydroceles, associated with inoperable herniae but not in the same sac, may be injected to add to the patient's comfort. Uncomplicated non-infected spermatoceles unassociated with an epididymitis can be injected.

Contraindications

The acute and congenital hydrocele will commonly resolve without treatment or will do so following simple aspiration. Those associated with undescended testicle or congenital hernia require operative treatment at the time the orchidopexy or herniorrhaphy is done. Those having calcium or cholesterol degeneration require operative treatment. A spermatocele associated with chronic epididymitis should never be injected because of the close association of the cyst to the epididymis and the danger of a flare-up of epididymitis. The presence of carcinoma, tuberculosis, or syphilis would, of course, contraindicate any such intreatment. Finally, infection associated with hydrocele is a contraindication.

*From the Department of Surgery, University of Michigan. Read before the Detroit Branch of the American Urological Association, Ann Arbor, Michigan, November 23, 1935.

Technique

The sensitivity of the patient to quinine should be ascertained prior to treatment. If he has had no experience with this drug, he should be given five to ten grains by mouth for several days before the proposed injection. Although there is little danger from reactions, the absorption from a spermatocele is rapid and may produce some unpleasant symptoms. A 5 per cent sodium morrhuate solution may be used in the sensitive cases.

The preparation of the scrotum requires that it be shaved, washed with tincture of green soap and cleansed with alcohol. Sterile towels are draped about the scrotum. One to two c.c. of local anesthetic are injected, producing a wheal at a point on the anterior inferior surface of the scrotum over the cyst. A No. 17 to No. 18G needle with a 50 c.c. Luer syringe attached is now inserted through the skin at a 45° angle pointing upwards, and into the sac. Should the needle strike the testicle, pain radiating up the cord into the groin will be noted. The fluid is thoroughly aspirated and the large syringe detached.

The fluid is now examined by an assistant. Hydrocele fluid is usually clear, markedly alkaline, has a high specific gravity, a large amount of albumin, and no sperm unless a spermatocele has ruptured into the hydrocele. Spermatocele fluid is hazy, is mildly alkaline, has a low specific gravity, a small amount of albumin, with a small number of dead sperm unless an opening to a seminiferous tubule still persists, when live sperm may be found.

The testicle and epididymis are palpated for evidence of possible carcinoma, tuberculosis and epididymitis. A 5 c.c. syringe, containing 2 to 4 c.c. of quinine hydrochloride and urethane, depending on the size of the cyst, is attached to the needle. A small amount of fluid is then aspirated to make certain the needle is still within the sac and the contents then instilled. Collo-dion is applied to the point of injection. A scrotal support is given to the patient and he may then go home with the advice to return, should excessive pain or swelling occur.

One injection may cure the condition, but as a rule it will refill partially, sometimes as much as two-thirds the original volume. A second injection is then made, using a dose of quinine hydrochloride and urethane, de-

pendent on the size of the sac. This injection may be made one to two weeks after the original injection. In the larger cysts, a third, or more injections may be required three to four weeks later.

Complications

Complications may occur following aspiration and injection. It is important to stress the need of good sterile technic because the field of injection is a notoriously dirty one. We have had but one experience with infection of a hydrocele sac, and this case had been injected elsewhere two weeks prior to entrance to University Hospital. The pyocele was distended, as large as a grapefruit, it was fluctuant, and the scrotum edematous. Simple incision and drainage cured the infection. Riba¹⁰ reports the case of a forty-six year old man who was operated on for scrotal gangrene twelve days after an injection treatment. The gangrenous area was definitely demarcated, and immediate debridement with exposure of both testicles was required. We have had three cases of chronic epididymitis flare up following injection,—one associated with a hydrocele, which subsided with conservative measures, and two associated with spermatoceles, of which one subsided with simple scrotal support and the other had the epididymis excised. Hematoma may occur in the sac, and, although we have not seen any of these, we do not feel that it is necessarily serious.

Conclusions

Ample time has not elapsed for a detailed report of our series of seventeen cases and their results, but we hope to report them in the future. We feel that the treatment by injection of chronic, simple, non-infected hydroceles and uncomplicated spermatoceles, unassociated with infection in the testicle and epididymis, has a definite field of usefulness which will give good results when properly performed.

Bibliography

1. Campbell, M. F.: *Jour. Urol.*, 20:485, (October) 1928.
2. Ewell, G. H., Sargent, J. N., and Marquardt, C. R.: *Wisconsin Med. Jour.*, 34:451, (July) 1935.
3. Floyd, E., and Pittmann, J. L.: *Georgia Med. Assn. Jour.*, 23:41, (February) 1934.
4. Huggins, C. B., and Entz, F. H.: *Jour. Urol.*, 25:447, (April) 1931.
5. Kilbourne, N. J., and Burray, C. J.: *Calif. and West. Med.*, 37:3, (July) 1932.
6. Levi, D.: Discussion of paper by Porritt. *Proc. Royal Soc. Med.*, 24:84, (May) 1931.
7. Porritt, A. E.: *Proc. Royal Soc. Med.*, 24:81, (May) 1931.
8. Porritt, A. E.: *Clin. Jour.*, 60:355, (July 29) 1931.
9. Pybus, F. C.: *Brit. Med. Jour.*, 1:239, (Feb. 8) 1930.
10. Riba, L. W.: *Amer. Jour. Surg.*, 21:418, (September) 1933.
11. Rolnick, H. C.: *Jour. Urol.*, 19:613, (May) 1928.

HISTORIC MARKERS

WILLIAM J. STAPLETON, JR., M.D.
DETROIT, MICHIGAN

"That the future may learn from the past."—John Rockefeller, Jr.

Our trip last summer through the Great Smoky Mountains and the surrounding country showed us that there was much of historical interest that we should know regarding our own country.

During the winter we did some reading that furthered our interest, such as "Tide-water Virginia," by Paul Wiltach. Especially, did the history of Charleston, South Carolina, appeal to us. So, when the time for vacation arrived, we started on our way south with Charleston as our objective. The first thing of interest was The Great Serpent Mound near Chillicothe, Ohio, situated in what is known as "Serpent Mound Park." In southern Ohio are hundreds of mounds, inclosures, village sites and cemeteries. The greatest of these prehistoric mounds is the Serpent Mound. What the purpose of this great mound is, no one knows. We do know that the serpent has played a prominent part in the religions of the world, both ancient and modern, primitive and civilized; as a symbol of gods or of impersonal forces. Because the serpent sheds its skin each year, it has symbolized to many people, eternity. They thought the shedding of the skin was renewing of life to the snake. Of course, to others it signified evil, like the serpent in the Garden of Eden. To physicians the serpent is of interest, for among the Greeks it was the symbol of Asklepios, the God of Medicine and Healing. Asklepios is said to have dwelt in or manifested himself through the large tame snakes which were kept in his temple. Even today, as a result of the above, two intertwined snakes constitute the sign of the medical profession. The Great Serpent is the largest known effigy mound in the world. It is over 1,200 feet long, with coils and convolutions. At one end in the tail and at the opposite end are a pair of jaws with an egg-shaped object in them. The story of the Mound Builders is veiled in mystery. Some of these mounds were used for burial purposes. It is thought that the Great Serpent Mound was religious in its purpose.

I have entitled my little article, "Historic Markers," from a book issued by the State of Virginia, wherein you may find every historical spot in Virginia. And now we come to Wytheville, Virginia. On our way here we stopped at Charleston, West Virginia, where they have a magnificent new Capitol Building, situated on the banks of

the Kanawha River. Our way was through the soft coal district and we saw many mines with their grimy workers. The mountain roads run up and down and have so many curves that slow driving is necessary. Wytheville, named for George Wythe, is located in the beautiful Appalachian mountains. It has some fine old Southern homes. George Wythe was the first professor of law in the United States. He taught that and many other subjects in William and Mary College.

Throughout the Blue Ridge mountains, accompanied by gorgeous views, we came to Winston-Salem, where the Moravians settled many years ago. Here are manufactured Camel cigarettes and Prince Albert tobacco (no advertisement). The town is dotted with huge warehouses and factories where the tobacco we saw growing on our way is made into the finished products, ready to go up in smoke. The amount of money spent in this country on smoking-tobaccos is in the millions. We found where all the old Model T Fords go. It is here in the South. This is the cotton raising section with the great cotton mills in the small towns. One might think he were in New England if it weren't for the noticeable quantity of poor negro dwellings.

We stopped at the Hotel Poinsett in Greenville, South Carolina. Wondering at the name, we found that General Joel Roberts Poinsett (1778-1851) brought the gorgeous poinsettia, the "Flor de Parque," whose flamelike beauty greets and gladdens the Christmas season, from Mexico. He introduced it into the United States. At that time he was Minister to Mexico. Remarkable in his day as author, statesman, orator, scientist and botanist, he was at one time a resident of Greenville. No gift of

his genius is more prized than this flower that bears his name.

This is truly the land of cotton. The negroes were beginning to pick; some places the fields were almost snowy white. In the early afternoon we drove through the great cypress swamp and later arrived at Charleston, South Carolina. We put up at the Hotel Fort Sumter, on the Battery. Charleston, named after Charles II, has been called "America's Historic City," and it certainly has many things of historic interest. It is said that the first independent government established in America was set up in Charleston. The city itself was founded in 1670. Its quaint, crooked streets, its great old homes and public buildings, the lovely gardens—here much history has been made. One may see gems of architecture, rare wrought iron grills and gateways.

There are famous churches like St. Michael's, built in 1752, where Washington and Lafayette worshipped. St. Philip's Church, whose congregation dates back to 1681, was burned and was replaced in 1835 by the present structure. This Protestant Episcopal Church is known as the "Westminster of the South." Here rest John Calhoun, Colonel William Rhett, Edward Rutledge and others. The Huguenot Church (French Protestant), where the services are conducted in French and the old Huguenot litany, is still used in the worship.

The City Hall stands in the original market place of the colonists. Built in 1801 for the United States Bank, it houses a wealth of treasures and historic relics, chief among which is the Trumbull portrait of Washington, done in honor of his visit in 1791. It is considered the most perfect and natural likeness of the Nation's first President. From our hotel we can see old Fort Sumter, famous in Civil War history, and the place where the first shots from Fort Johnson were fired on the Stars and Stripes. Today, the fort is pretty much in ruins. Its history is told in the Archives of the War of the States.

The Battery Park or White Point Garden is the recreational center of Charleston. It is planted with large oaks and palmettos. Here are cannon representing the cycle of American wars and monuments to the defenders of Fort Moultrie, 1776, and Fort Sumter, 1861-1865. It overlooks Charleston harbor at the intersection of the Ashley and Cooper Rivers. From the park one can

also see the historic harbor fortification and, beyond, the Atlantic Ocean. There is a fine road along each bank of both rivers. What a treat it would be to have such a roadway built along the Detroit River. One cannot leave Charleston without mention of the Magnolia and Middleton Place Gardens, famous for their exquisite flowers and formal gardens. All the gardening books written could hardly do justice to Nature's handiwork. We walked along the streets admiring the picturesque old houses with their verandas overlooking beautiful gardens. The unusual street names, Meeting Street, Trade Street and Longitudinal Street proved to be interesting to us. The iron fences, which enclose the house gardens, show evidences of etchers' and artists' detail. To the lover of antiques, this town is a Mecca. I never saw so many. Charleston has many "firsts" in American history. The first cotton to be shipped from the American Colonies was sent from Charleston to England, in 1784. The first fire insurance company was started in Charleston under the title of, "The Friendly Society for Mutual Insurance of Houses Against Fire," in 1736. The first prescription drug store in America began its operation in Charleston in 1780. The College of Charleston is said to be the oldest municipal institution of higher education in the United States, chartered in 1785. And so we could go on singing the praises of old Charleston for pages, but our car is ready to drive us North, away from the oncoming Florida storm.

Our route took us over the magnificent Cooper River Bridge to Sullivan's Island. For the rest of the day we drove in a pouring rain through the pine forests. These pine forests supply us with turpentine. In one of the small towns we saw two signs, one, "Vagrancy Laws Strictly Enforced," and the other, "Quiet Please, Sickness," both signed "By Order of the Police Department." Night found us at New Berne, North Carolina, named after Bern, the capital of Switzerland, settled by Swiss and Germans, seeking, as usual, religious, political and industrial freedom, and advancement in the world. The leader was Baron Christopher de Graffenried, to whom Queen Anne of England had granted a tract of land between the Neuse and Trent Rivers in Carolina. This is an interesting old town. From New Berne we drove

northward through The Great Dismal Swamp to Suffolk, Virginia, the peanut center of America, then to Portsmouth, by ferry to Newport News, and on to Norfolk. The United States' naval bases, with the great docks for building and repairing the ships, are stationed in Newport News. The magnificent buildings lend a college bred air to the city. The streets of Norfolk are crowded with sailor folk. We drove around Fortress Monroe, where we saw the disappearing guns maneuver. In part of the old fort was a place where Jefferson Davis was kept a prisoner. Near Old Point Comfort, in the little town of Hampton, is the famous Negro College, known as Hampton Normal Agricultural Institute. A short drive brought us to Yorktown, the scene of the surrender of Lord Cornwallis, marking the close of the Revolutionary War. Here we are in Tidewater County, the Cradle of the Republic. Yorktown, Jamestown and Williamsburg are the historical centers. Yorktown, with its historic lore, is now being restored to its Revolutionary setting. The Government has made it a National Park and you may wander about, visualizing the turmoil that went on during the siege that freed us from European domination. Here one may also visit the Moore House, where the terms of the surrender of Cornwallis were drawn up; the old Customs House, first in America; and the Grace Episcopal Church.

A few miles away is Jamestown, the first permanent English settlement in the United States. Little did those passengers of the three ships, "Susan Constant," "Goodspeed," and "Discovery" realize the importance of their landing in May, 1607. The story of this little settlement, with its pestilence, famine, and Indian massacres, reads more like fiction than actual events. In spite of its abuses, the diminutive government survived and became the first seat of authority in the Virginian Colony. The first Anglican Church in America was built here. The site is now marked by two broken-down towers belonging to a church later built in 1676. There is little left today for the visitor to see but the magnificent view of the river.

Between Yorktown and Jamestown is the most fascinating town in America—Williamsburg. This historic city, the colonial capital of Virginia, is being restored under the sponsorship of John D. Rockefeller, Jr. He has spared nothing in order to return this city to its original quaintness. In 1699,

the capital of the colony was moved from Jamestown to Middle Plantation, later named Williamsburg in honor of King William. Among the historic buildings that may be seen here are the Governor's Palace with its formal gardens, the Capital and the Raleigh Tavern, reconstructed on its original foundations; the Ludwell-Paradise House; the old Court House of 1770; Market Square Tavern; Travis House; Sir Christopher Wren Building at the College of William and Mary; Bruton Parish Church; The Wythe House; The Prison of the Virginia Colony, and the Powder Horn, or Magazine. Of interest to doctors is "The Sign of the Golden Ball," a brick house, erected between 1720 and 1735. This house was inherited by Dr. George Gilmer from his father, a surgeon and apothecary. Upon his arrival here from his studies in England, "the young physician created a storm of protest by advertising in the *Virginia Gazette* in 1766 that he intended 'purfuing' with the Practice of Medicine, the Art of 'Midwifery.'" The Davidson Shop was where Dr. Robert Davidson kept an apothecary shop where he sold "all sorts of 'Balfoms, Dicoctions, Electuaries, Elexirs, Emplaifters, Extracts, Infusions, Liquors, Magifteries, Oils, and Ointments.'" Dr. Blair's Apothecary Shop is a small brick building, erected early in the Eighteenth Century by Dr. Archibald Blair. The Archibald Blair House, built in 1716-1718, was the first house of Dr. Archibald Blair. He graduated in Medicine at the University of Edinburgh and came to Virginia in 1690. Dr. Robert Waller's House was his residence when he had his Doctor's Shop. So one may see that Williamsburg was well supplied with doctors.

William and Mary College was established at Middle Plantation as a result of the activities of the Reverend James Blair, Commissary to the Bishop of London. King William and Queen Mary, moved by his personal solicitations, granted a charter for the college on February 19, 1693. The institution was named the College of William and Mary in Virginia, the name it has borne ever since. Commissary Blair was its first president. The College played an influential part in the life of Colonial Virginia and the struggle to form a new nation. George Washington received his surveyor's certificate here, in 1749. But he never was a student of the school. It is the Alma Mater of three Presidents, Thomas

Jefferson, James Monroe and John Tyler. Four signers of The Declaration of Independence, Representatives, Senators, Governors, Cabinet Officers and Judges are included in its roll of honor.

The priority of William and Mary shows it to be the first American College to receive a charter from the Crown, 1693; the first and only college in America to be granted a coat of arms from the Herald's College, in 1694; the first American college to have a full faculty; the first Greekletter fraternity, Phi Beta Kappa, was founded here, December 5, 1776. The buildings and grounds are being restored, in keeping with the rest of Williamsburg. If one goes south he should not fail to visit this interest-provoking old town. There is an excellent article in the magazine *Fortune* for the month of July, 1935, which is richly illustrated. It is entitled, "Mr. Rockefeller's \$14,000,000 Idyl." One may also purchase a delightful little book entitled, "Williamsburg in Virginia," published by Colonial Williamsburg, Inc., which tells the whole story of Williamsburg. It is a replica of a very old book.

We crossed the broad York River, landing at Gloucester Point, and lost no time in making our way to "The Home of Doctor Walter Reed," whose name is associated with yellow fever. The simple little house, where the great doctor was born, stands in a rural setting with its lone neighbor, a general store. I obtained the house key from the proprietor of the general store. I was disappointed. There is very little to be seen. The register showed that the last visitor was there two months before. The contrast between these humble surroundings and those of the great hospital in Washington, which bears his name, is very marked.

Our next stop was Richmond. A Southern city with real Southern hospitality. The former capital of the Confederacy has many sights to offer. We visited the Confederate White House, the Medical College, John Marshall's home, and the Avenue of Monuments.

Richmond, in the heart of the tidewater county, fairly bristles with tradition and history. It is the capital of Virginia and her largest city. Captain John Smith certainly knew how to drive a bargain when he bought the land from Chief Powhatan. Maybe Pocahontas had a word or two to say in John Smith's behalf. Thomas Jefferson, not only a statesman and politician,

but an architect as well, designed the main portion of the Capitol Building. He got the idea from the Maison Carree at Nimes, France. In the rotunda is a statue of Washington by Houdin, the finest and most valuable piece that the United States possesses of the great man. Grouped around about are the busts of other Virginia-born Presidents. Aaron Burr, that romantic traitor, was tried here before Chief Justice John Marshall.

Fredericksburg is a small town but is filled with the precious memories of days gone by. Like Richmond it suffered during the War of the States. One of the most interesting places in this town is "The Hugh Mercer Apothecary Shop," owned, before the Revolutionary War, by Dr. Hugh Mercer. It was used as a gathering place of patriots. General Hugh Mercer, born in 1721, was a Doctor of Medicine, graduated from Aberdeen Medical School. He was also a Brigadier General in the American Army. Washington had him command the advance column in the campaigns of New Jersey, New York and Pennsylvania. He crossed the Delaware River with Washington, on Christmas night, 1776. While leading his men to the Battle of Princeton, January 3, 1777, he was mortally wounded by a bayonet and died a few days later. His early life was colorful. He joined the army of Bonnie Prince Charlie and was present at Culloden, but escaped with his life from that field of blood. Because he valued his life he left Scotland and came to America. In 1746, he founded the town of Mercersburg, Pa. He practiced medicine there till 1755. After the French War he settled in Fredericksburg, where one may see his office at the corner of Princess Anne and Amelia Streets.

Fredericksburg, the boyhood home of George Washington, is one of the most historic sections in America. Off of the Kings Highway, on the north side of the Rappahannock River, is the Washington boyhood farm. Here, too, is the site of the cherry tree incident. Mary, the mother of George, lived here in a quaint, old fashioned, one and a half story home till her death, in 1789. A few blocks away is the meditation rock, her favorite retreat while reading her Bible. In this quiet place she is buried. The old City Hall was built in 1813, and twelve years later a reception was held there for Lafayette. The old Slave Block, used for the sale and hire of slaves since before

the Civil War, is still there. The old colored guide, who took us about, said his mother had been sold from that block. James Monroe, President of the United States and father of the Monroe Doctrine, had his first law office in Fredericksburg, in a quaint one-story building which is still standing. He held more public offices than any other American and was also a vestryman in St. George's Church. This old church, which was right across from our hotel, contains a memorial window to Mary Washington. Reverend Patrick Henry, uncle of the famous orator, was the first rector. Under the front steps is buried the maker of the guns for the Revolutionary War, Colonel Fielding Lewis, who married Betty, sister of Washington. Just prior to the outbreak of the War, the first small arms manufactory was established here.

Kenmore, the home of the patriot Colonel Fielding Lewis and his wife, Betty, is here. No shrine in America surpasses it for beauty and history. It is a beautiful specimen of colonial architecture, boasting of walls two feet thick. Every room has ornamental ceilings and mantels designed by George Washington. Colonel Lewis, a much older man, wanted his young wife to have the finest house in Fredericksburg and he made good his word. The women of the town have worked like beavers to raise the money to get possession of the property and to restore the house as near the original as possible. The Metropolitan Museum of New York has loaned the furniture for an indefinite period of time and the various historical societies of the country have contributed generously to its upkeep.

George Washington's birthplace at Wakefield is thirty-eight miles from here, now restored and a National Shrine. Forty-six miles, on the same route, is Stratford, home of Robert E. Lee, also a National Shrine. This country became the battlefield of four of the most important conflicts of the Civil War. The National Battlefield Museum is one of the greatest collections of Civil War relics in America. These have been gathered from the battlefields of many sections.

We made a reluctant departure from Fredericksburg and proceeded to Washington, D. C. On the way to Washington we stopped at the Headquarters of the Marine Corps at Quantico, known as the training place for the "Sailors and Soldiers of the Sea." Washington, we found, was quite the

busiest place on our trip. She is undergoing a beauty treatment, architecturally speaking. The new government buildings will soon put her in a position to rival the great capitals of Europe.

It is a short drive from Washington to Baltimore. Perhaps this city holds more interest for the doctor than any we have visited so far. Here we find Johns Hopkins, one of the most noted institutions of its kind, anywhere.

When we left Baltimore, we nosed the car homeward through New York State and Connecticut. Connecticut celebrated her three hundredth anniversary this year. This trim little New Englander has many sights to be proud of.

One more point of interest and we are through. On our return home through Pennsylvania, we followed a branch of the Susquehanna River, on the Roosevelt Highway. Near Wyalusing, on top of a hill, we saw a sign, "Asylum." It was a marker telling of the founding of "Azilum," in English, "Asylum." The Asylum was founded in 1793, by the French Royalists, under the direction of Viscount Noailles and Marquis Omer Talon as an asylum for the French who fled the Revolution to come to America. It was to be used, also, as a refuge for Marie Antoinette, should she succeed in escaping. A small town of fifty log houses was built, the largest of which was called the Queen's House. It is said to have been the largest log house ever built: 60 feet by 84 feet, two stories high, with sixteen fireplaces. The city was planned with nine streets eastward and westward, and five streets northward and southward. Three inns, some stores, a chapel, a theater, a grist mill and a brewery made up the remaining edifices of the town. The town lasted ten years, until Napoleon pardoned the French emigrants and wanted them to return to France. The life of the town was short, but it accepted the attentions of such brilliant men as Louis Philippe, later King of France; Prince Talleyrand, Duke of Montpensier; the Duke de la Rochefoucauld Lancourt and many others. The story of Asylum and the French exile of 1793 is a fascinating chapter in the history of our country. You may read about it in a small booklet entitled, "Franco-American Pamphlet," series No. 4, by Elsie Murray, Cornell University, published by The Tioga Point Museum, Athens, Pa.

TOTAL AND PERMANENT DEAFNESS FROM PAROTITIS

J. H. BRISTOW, M.D.†
BAY CITY, MICHIGAN

Total and permanent deafness following an attack of parotitis is a condition which merits much more attention than has been given it in the literature. A few cases have been reported, but due to the scarcity of living and post mortem cases, little has been definitely established as to actual pathology present.

It has been postulated that the deafness is possibly due to a toxic neuritis involving the eighth nerve, yet no explanation has been given for the affinity of this toxin for the eighth nerve in particular. The possibility of direct extension of the toxin along the facial or trigeminal nerves has been excluded in that a left sided deafness may come from a right sided parotitis. Some of the few cases which have been studied post mortem show an acute exudative process in the labyrinth, which it was felt was the pathology responsible for the condition in these particular cases. However, many patients have no vestibular symptoms whatever so that all cases cannot be attributed to labyrinthian pathology.

It is to be hoped that some definite work may be done to establish the physiology and pathology of this condition in order that

some form of treatment may be instituted. To be consulted on such a case and to be forced to admit that the medical profession can give no definite view on either the pathology or treatment is a reflection upon us.

The following case history is typical of the sequence of the events in the production of this condition:

An intelligent, nine-year-old girl developed bilateral parotitis on July 1, 1935, which ran a normal course. One week later she developed a very rapidly progressing nerve deafness which was complete in one week and has remained so ever since. She has a past history of meningococcus meningitis seven years ago which was treated with serum intraspinally and pronounced cured. The family history and blood study proved negative. Inability to cooperate prevented labyrinthian tests although no vestibular symptoms were evidenced.

†Dr. Bristow graduated from the Wayne University College of Medicine in 1931. He is in charge of the Eye, Ear, Nose and Throat department of the Jones Clinic and Samaritan Hospital, Bay City.

UPPER UROLOGICAL TRACT OBSTRUCTION AND HYPERTENSION*

L. W. HULL, M.D.†
DETROIT, MICHIGAN

The rôle of urethral stricture and vesical neck obstruction in the production and maintenance of hypertension is well known. That so-called "back pressure" on the kidneys from these pathological entities is a cause of increasing the work of the heart and raising arterial pressure to maintain urine secretion, is accepted without controversy. The same result can be brought about by ureteral obstruction with its attendant infection of ureter, kidney pelvis and kidney. We wish to report briefly two cases with high systolic and diastolic blood pressures with a marked drop in the height of the pressures and marked clinical improvement following treatment which at least partially cleared the ureteral obstruction and attendant infection.

Both patients had the benefit of complete medical studies, the correction of other pathology and advice as to personal living and habits. The part played by the treatment of the ureter and kidneys therefore may not

entirely explain the improved health. However, the immediate attendant clinical improvement following ureteral catheterization and pelvic lavage and the statements of the patients themselves as to how much better they felt following such treatment, shows that it did play a major rôle in their improvement. By relief from back pressure, a very definite reduction in both systolic and diastolic pressures was obtained after the first ureteral catheterization.

In both cases obstruction to the ureteral catheter was present in one ureter and there

*Read at December, 1935, staff meeting of Receiving Hospital, Detroit.

†Dr. L. W. Hull is a graduate of the University of Michigan Medical Department, 1911. He is Associate Attending Urologist, Department of Urology, Grace Hospital, Detroit; Associate Attending, Department of Urology, Receiving Hospital, Detroit, and Extramural Lecturer in Postgraduate Medicine, University of Michigan. His practice is limited to Urology.

was bilateral renal infection as evidenced by the demonstration microscopically of white blood cells in the divided urines. No attempt was made to dilate the ureters to any greater extent than that secured by the No. 5 French catheter because of severe reactions following the attempt at introduction of larger sizes. Care was taken to introduce the catheters not more than 25 cm., thus lessening the amount of reaction and avoiding possible injury to the kidney parenchyma by the tip of the catheter. It is probable that there was scar tissue formation in these ureters, ureteritis and stricture formation at the point of catheter obstruction. A large calibered stricture, ureteritis with submucous edema impeding the outflow of urine would seem to be the explanation for the back pressure in the opposite ureters where no definite obstruction could be demonstrated. Urography sometimes fails to show a definite stricture although a moderate degree of pelvic dilation is shown. We have treated several cases of hypertension with unilateral ureteral obstruction and infection in the corresponding kidney and no obstruction to the passage of a catheter or infection in the opposite ureter, and kidney whose blood pressures were not reduced by like treatment. It is perfectly logical that we should get no effect on the blood pressure in these cases. One good kidney, functioning without handicap, is all that is needed to carry on under the ordinary conditions of life.

Case 1.—A married man, aged fifty-eight, complained of dizziness, frontal headaches and pressure in the head. He knew that he had had a high blood pressure for several years. The first dizzy spell two years ago lasted two days, at which time his blood pressure was 200. Six months ago he began having frontal headaches, usually in the morning, and had a Bell's palsy which lasted a week. His blood pressure at this time was found to be 260. At times there had been palpitation of the heart. There was a history of sinus trouble, typhoid fever, mild arthritis and gastric ulcer with hemorrhage 8 years ago. Five years ago he passed a calculus from the left kidney. The teeth were artificial. The patient's mother died at seventy-three of a stroke, his father at eighty-three of heart trouble and he has one brother and four sisters living. One sister has high blood pressure.

Physical examination showed a well nourished man, weighing 190 pounds, who looked and acted sick. His blood pressure was systolic 240 and diastolic 120, with a pulse rate of 72. There was no edema. The heart was not enlarged, there were no murmurs and A2 was greater than P2. The fluoroscope showed the lungs clear, a sabot-shaped heart, not enlarged, with the aorta short, tortuous, with visible descensus. The electrocardiogram showed a left preponderance. The endarteries of the eyes were tortuous and there was stippling in the maculae.

The patient was presbyopic. Rectal touch showed a prostate within range of normal. Catheterization found no residual urine in the bladder. On cystoscopic examination a No. 5 French sized catheter was obstructed 15 centimeters from the vesical orifice in the right ureter, the same sized catheter passed 25 centimeters into the left ureter. Indigo carmine injected intravenously appeared normally in three minutes from both catheters in fair concentration. The bladder urine was negative for sugar, there was two plus albumin, a specific gravity of 1.014, and a few white blood cells. The divided urines showed from the right kidney innumerable white and red blood cells, from the left kidney white and red blood cells two plus in the low power field. The non-protein-nitrogen of the blood was 45 mgm. per 100 c.c. of blood.

Case 2.—A woman, forty-five years of age, the mother of one child, complained of nervousness, pain in the right lumbar region and stiffness and pain in the back of the neck. She also complained of palpitation of the heart, a rapid heart and some dyspnea on exertion. In 1912 the patient had a tubal pregnancy, in 1913 a bilateral ovariectomy and salpingectomy with menopausal symptoms following. A tonsillectomy and cholecystectomy were done in 1928. There had been periods of good health since, but for the past four years she had been gradually feeling worse. She was constipated and had had attacks of frequent urination, diurnal and nocturnal, at intervals. The patient's mother was living and had heart trouble. The father was killed in an accident.

Physical examination showed a well developed, somewhat worried looking woman of the age given. The blood pressure was systolic 220 and diastolic 120 with a pulse rate of 72. The heart was enlarged to the left with the maximum apex impulse in the anterior axillary line. The heart sounds were regular, A2 was greater than P2, and there were no murmurs. On fluoroscopic examination the heart was sabot-shaped and enlarged to the left and downward, the left border being in the anterior axillary line. The electrocardiogram showed nothing definitely abnormal. Ophthalmoscopic examination showed tortuous endarteries, stippling in the maculae and presbyopia. There were four devitalized teeth with possible infection of the tips of the roots. There was gingival resorption. Some tenderness was present over the lower third of the right ureter, but no masses were felt on abdominal examination.

Ureteral catheterization was done and a No. 5 French sized ureteral catheter was obstructed 4 cm. from the vesical orifice of the right ureter, a No. 4 ureteral catheter passed. There was no obstruction in the left ureter to the passage of a No. 5 catheter. Indigo-carmin injected intravenously appeared in one and a half minutes from both catheters in fair concentration. There was no albumin, sugar or white or red blood cells in the urine obtained by catheter from the bladder. The specific gravity was 1.004. The divided urines showed from the right kidney 10 to 15 white blood cells and 20 to 25 red blood cells, from the left kidney innumerable white blood cells and numerous red blood cells in the low power field.

In this report it is inadvisable to go into a discussion of the etiology of hypertension and Bright's disease. We assume that there is some constitutional cause and that the insults incident to life are simply factors in increasing the chances of any individual so predisposed to develop a rise in pressure to a

greater or lesser degree. Both cases had a history of heart trouble or high blood pressure in their immediate antecedents, both had known for a few years that their blood pressures were above the normal at times.

In neither case reported was there a history of macroscopic or microscopic hematuria, albuminuria, edema or urinary tract pathology except for the passage of a calculus from the left kidney in Case 1 five years ago. At that time the patient was under the care of a competent urologist and had received cystoscopic treatment. Both cases had been hospitalized at various times and said they had not been informed of any urinary tract pathology.

No extended effort was made to demonstrate strictures of the ureter with bulb catheters as experience has shown that there is a markedly painful reaction following such manipulation of infected ureters. What effect foci of infection have primarily on the blood pressure is a controversial subject, but, given an upper urinary tract with obstructive pathology, renal or ureteral infection is certain to follow with swelling of the ureteral mucosa and back pressure.

In both cases a very definite fall in both systolic and diastolic blood pressures took place following ureteral catheterization and pelvic lavage. In Case 1, the patient was considered by the internist as having hypertensive heart disease with the kidney as the primary factor and the blood pressure dropped from 220/120, and higher at times, to a practically stable level of 170/110. Immediately following two of the ureteral catheterizations, within three to four hours, during the first three months of treatment, the readings recorded were 155/95 and 135/90. The patient felt well enough in two months to go back to work. A year after the start of treatment, intravenous urography showed morphologically a practically normal urological tract. It is interesting to note that following the first treatment his dizziness and headaches left him and since the third treatment, the blood pressure has remained practically stabilized at the figure 170/110. During this period of six weeks he also lost some 20 pounds in weight. Whether this was entirely due to his being on a diet or due to loss of fluid which had been stored in the tissues through improved renal function, or both, is impossible to say. At no time was there any visible edema. His treat-

ment consisted of practically nothing more than ureteral catheterization and pelvic lavage and hexamethylenamine following each cystoscopic treatment. In this case there was a non-protein-nitrogen of 45 mgm. per 100 c.c. of blood, showing definite nitrogen retention. I wish to emphasize that this man was very sick. He could do no work and his life had become a burden to him and to his family. In the ordinary course of events he undoubtedly would have died a cardio-renal death in the not distant future. He is now a useful and happy member of society.

A diagnosis of hypertensive heart disease with cardiac enlargement was made in Case 2 by the internist. Urological examination was requested because of pain and tenderness in the right lower quadrant of the abdomen, close to Poupart's ligament, suggesting a painful ureter (ureteral tenderness), pain in the right lumbar region without accompanying tenderness, and attacks of frequent and painful urination. The catheterized specimen of bladder urine was negative chemically and microscopically. A No. 5 French catheter was obstructed 4 cm. from the vesicle orifice of the right ureter, a No. 4 passing. That the obstruction was not simply a temporary affair was proven at subsequent treatments. The divided urine showed white blood cells in both specimens obtained in spite of the fact that the bladder urine was negative microscopically. This observation we have made in other patients, that is, that at the first examination the bladder urine may be negative microscopically and yet white blood cells in fairly goodly number may be present in the samples taken directly from the kidneys as in this case. Again as in Case 1 there was a drop in the systolic and diastolic blood pressures from 220/120 to 180/110 after ureteral catheterization. Resection of the thyroid was done during the course of the urological treatment, which undoubtedly helped to stabilize the blood pressure at the level to which it had fallen and the patient became much quieter mentally.

In the presentation of these two cases of hypertension, showing the rôle of ureter obstruction and renal and ureteral infection in the maintenance of a heightened pressure, there is nothing new. As long ago as 1880, Cohnheim recorded as his observation that partial or intermittent obstruction of the ureters produced cardiac hypertrophy and increased blood pressure. These pa-

tients still have blood pressures far above the normal which they undoubtedly will always keep due to the inherent tendency of this disease, hypertension, to progress. However, both were close to the danger line in both systolic and diastolic pressures when first seen if we accept 120 diastolic as being very close to that point. We have at least clinically given our patients a much better chance for life.

It is not our purpose to advise the performance of promiscuous ureteral catheterization on all patients with hypertension, but, as in the cases reported, anything suggestive of renal or ureteral involvement in the history or physical examination, should be an

indication for more than the routine laboratory examination of the bladder urine. The problem of treating hypertension is not always the same. There are factors other than the straight hypertension to be considered; to illustrate, obesity, an overload of emotionalism as in hyperthyroidism, and, as we have endeavored to show, obstruction in the upper urinary tract. If the dominant factor or factors can be found and eliminated we can, as in the cases reported, take off some of the overload and our patients are on the road, not to recovery from their hypertension, but at least to a much more comfortable life.

Detroit Polyclinic

HYPERTROPHIC STENOSIS OF PYLORUS IN AN ADULT

EARL G. KRIEG, M.D.†

DETROIT, MICHIGAN

Hypertrophic stenosis of the pylorus in the adult is not frequently seen but the condition is probably more frequent than reports would indicate. Eighty-one cases have been recorded in the literature, but the Mayo Clinic discovered twenty in ten years.

The etiology is believed to be congenital but it is frequently seen associated with peptic ulcer, cholecystitis, cholelithiasis and other extragastric lesions. Hypertrophy secondary to spasm must be considered. As in the infant, the stenosis is found predominately in the male, about 20 to 1. Approximately one-half of the cases become acute in the fourth decade. In the Mayo series the youngest patient was twenty-three years, and the oldest sixty-four years.

The pathologic changes are essentially those found in the infantile form of the condition. Symptoms begin with gradually increasing and indefinite gastric upsets often characterized by constipation, anorexia, pyrosis, nausea, pain and food dyscrasias. These upsets are irregularly intermittent at the onset and become quite regular and progressively worse. Toward the advanced stages, vomiting, weakness, loss of weight, dehydration, dilatation of the stomach, visible peristalsis and incapacitating pain are commonly found. A tumor mass may occasionally be palpated. Duration of symptoms averages ten years but may vary from one to forty.

Diagnosis is made by eliciting the long history of dyspepsia, evidence of pyloric obstruction without ulcer, and by the x-ray.

Treatment in the progressive case is always surgical, with removal of the greater portion of the ring or complete resection. The Rammstedt operation apparently has not been used successfully.

Mrs. M. M., white, aged thirty-seven years, was admitted to Woman's Hospital Surgical Clinic in May, 1933. Her symptoms began acutely after lifting a heavy object eleven years before. A severe, sharp, shooting pain occurred in the epigastrium near the umbilicus and radiated to the right around the abdomen to the back. Since then the attacks have come on in the same sudden manner at various intervals and gradually have become more severe and frequent in appearance. The pains last from three-fourths to two hours and are colicky in character. During this time the patient can feel a mass about the size of a hen's egg which "slips back" when the pain ceases. The prone position relieves the pain and she assumes this position immediately the colic begins. Headaches are frequently present. Menses is frequently present at the time of the attack. Her appetite is always good but meat and potatoes cause gaseous eructations. Severe constipation requiring almost daily enema or catharsis has been present since childhood. There has been no loss of weight; only occasional vomiting during attacks.

The patient's temperature was 98.2° F.; her pulse 80 per minute; blood pressure 140/102. Her appearance was that of a well developed female with

†Dr. Earl G. Krieg is a graduate of Detroit College of Medicine and Surgery, 1925. He is Junior Attending Surgeon at the Woman's Hospital; Junior Attending Gynecologist at Receiving Hospital, and Instructor at Wayne University Medical School. His specialty is General Surgery.

moderate panniculus most prominent about the hips and abdomen. The head and thorax revealed no abnormal findings. The abdomen revealed definite tenderness on deep palpation over the gallbladder region, where an indefinite tumor mass could be rolled beneath the fingers, and was reduced by pressure, giving a sensation similar to that when a small indirect hernia is reduced. The tumor did not reappear and was not palpated again until the day before operation. No hernial opening could be palpated.

Pelvic and rectal examinations revealed minor lacerations of pregnancy and a second degree retroversion of uterus. An x-ray examination of the gastrointestinal tract, also an examination of the blood and urine, revealed no unusual findings.

An operation was performed in which the region of pyloric vein there was found a condition that is described fully by "hypertrophic pyloric stenosis" as found in the infant. This ring is about 3 cm. in the outer diameter, one centimeter in width

and an aperture 1 cm. in diameter. The appendix showed evidence of a previous acute condition.

All other organs were normal to palpation and inspection except the retroverted uterus. The operation consisted of resection of the anterior portion of the ring and duodenal wall and closure by horizontal lines of suture. The appendix was also removed.

The laboratory report revealed fibrous hypertrophy of the pyloric wall, and subacute and chronic obliterative appendicitis. The postoperative convalescence was uneventful; the patient was discharged on the tenth day, and has had no return of the symptoms.

Bibliography

- Judd, E. S., and Thompson, H. L.: Hypertrophic stenosis of pylorus in adults. *Surg. Clin. North Amer.*, 13: no. 4, 801, 1933.
Elmer, R., and Boylan, C.: Hypertrophic pyloric stenosis in an adult. *Amer. Jour. Surg.*, n. s. 25, no. 3, 499, (Sept.) 1934.

INADEQUATE POOR LAWS

R. G. TUCK, M.D.†

PONTIAC, MICHIGAN

The art of healing is practiced in much the same manner in every locality throughout the North American continent. The fundamentals, the ethics, the methods of diagnosis and treatment are essentially the same in whatever state we may visit. The greatest variation, and that is not so great as one would imagine, is in the fees collected for services rendered. The individual physician has a different viewpoint concerning methods of treating his patients, but this applies mainly to those items of a minor degree or nature. Most of us graduated from a Class A school in which the accepted diagnostic procedures and standard methods of treatment are taught. In fact, the teaching of Medicine has been very completely standardized in our country today. We all subscribe to the same publications, read the same books, and attend the same medical conventions wherever we are located. Our hospitals are classified and rated according to the same universal standards.

It is true that this uniformity has improved the types of men practicing medicine, as well as their allied groups, and it has standardized medicine to the point where it varies little in the various states. This is what we have all wanted and have all fought for over the past fifty years. It has raised our profession to the highest level existing in the world today. Physicians are competent and are rendering scientific medical service which greatly benefits society at large. New instruments, new methods, new and costly hospitals, with all of their special equipment, as x-ray, radium, laboratory procedures, etc., have all become a necessity in the modern conception of adequate medical service. All this has, however, increased the cost of medical care and has placed such service beyond the reach of many of our people with moderate incomes.

We have read much concerning this problem of increased medical costs and we have heard many plans advanced that would attempt to solve the problem. Practically all of these plans have been some adaptation of European programs and they have met with the disapproval of organized medicine for the most part. The objections of our medical men to these plans have been that they all tend to destroy the physician-patient relationship, they regiment the physician into a loss of initiative, and they will eventually destroy the competitive spirit which has been a very important factor in raising our medical standards. These arguments seem to be justifiable in themselves, but the question of how best to furnish this much needed medical care goes unanswered and the public suffers thereby.

Consequently, a plan or program that deviates little, yet corrects the current abuses in the present system, would seem to be the one most likely to win the approval of the majority. Our present Poor Laws have been patterned after the old Poor Laws, as drawn up in England many years ago. In many of our States, the Poor Laws have remained unchanged over a period of years. This is true in our own state of Michigan and in practically all of the others. During prosperous times the public seldom thinks about Poor Laws unless they happen to come under their immediate jurisdiction. There is very little demand made to change them or to bring them up to date; therefore, our legislators pay but little attention to modernizing these laws. As a result, when a major depression strikes, as did the one in 1929, the antiquated machinery "bogs" and fails to function properly. As it takes much time and an aroused public opinion to write changes into any laws, we still find society forced to get along under a system which was designed to care for problems existent in the year 1880. This, of course, does not apply to the Crippled Child and Afflicted Adult laws recently passed. It does apply, however, to home and office care administered to the indigent.

The medical men have, perhaps, suffered under such conditions as much or more than any other group of society. We have been allowed to carry a financial burden almost beyond our capacity and we should be vitally interested in advocating the modernization of our present laws. The less radical the change, however, the less opposition will be met. As was stated above, any change that will correct current abuses should suffice for the present.

What are these abuses and their possible corrections?

†Dr. R. G. Tuck is medical director of Oakland County Welfare Relief Commission.

First: We find that patients are not granted the privilege of selecting their own physician.

Second: Politics dictate much of the actions of local officials, both in the selection of physicians and the amount and kind of care given certain families. It should not be possible for one indigent person to receive better medical care than his other unfortunate brothers simply because of political factors. Yet that is what is occurring many times under our present laws.

Third: Physicians are not being paid for the services rendered these people. Any fair minded person must agree that an adequate remuneration is ordinary common justice. Pauperize the physicians in our country, and the rich and poor suffer alike, in that the standards of medical men are lowered through their inability to keep abreast of modern methods, postgraduate study, clinics, etc.

Fourth: There exists a sufficient lack of voice by organized medicine as to how these medical programs shall function. Medical men should logically be the only ones to decide on questions of a purely medical nature; but they have little or nothing to say under our present Poor Laws.

Fifth: Present records are of little, if any, value. Modern record keeping systems should be installed to insure proper statistical material.

Sixth: There is a lack of a uniform, coördinated medical program throughout the States. Such a program should operate under the advisory control of a Committee from the various State Medical Societies.

If we can modify or amend our present statutes to incorporate the above-mentioned changes, we shall have taken a step forward that will prove of great value to physicians and patients alike.

Under our present system of caring for the sick person, who through various reasons has become socially delinquent, an investigation is made by a member of the staff of the County Commissioners of the Poor. How adequate or efficient this investigation is varies with the particular county in which it is made. Such investigations vary from one extreme to the other. It would seem that modern standards should be adopted as a uniform basis throughout the state.

If a person is earning a mere subsistence wage and is faced with a major illness, it is perfectly evident that he cannot provide himself or his family with adequate medical care. He, therefore, must apply to the county board of Poor Commissioners for aid in meeting his problem. This is supposed to be his right, under the law of the land and under the moral code of humanity. Manytimes, however, the person is subjected to much delay and

improper care as a result of lack of understanding on the part of some unqualified person representing the Commissioners of the Poor. This brings much suffering to the patient, and, many times, much greater expense in the months following. Pinch-penny attitudes on the part of some officials often create a much larger expenditure at some future date. These officials have very little if any medical background and judge almost every question from a purely economic or political viewpoint. Surely this should be corrected in justice to all.

Furthermore, the question arises as to what provision should be made for adequate medical care for those thousands of recipients of mothers' pensions, old age pensions and unemployment insurance. It is all very well for politicians to propose and enact laws to furnish gratuities for these various individual groups, but how about their ability to pay for adequate medical care on the small monthly stipend allowed them? Are the medical men going to be expected to carry this financial burden, or are we going to provide some means whereby the physician shall be justly paid for his services?

Of course much of this depends upon the attitude taken by organized medicine. Our political friends will not assist us unless our needs are made known. The time is here when medical men must make this preparation or we must expect to care for this group of people as an act of charity. It is all too evident that no one can finance a major illness on an income of thirty dollars per month under present living conditions.

Therefore, it would seem logical at this time to attempt to bring our present antiquated Poor Laws up to date with provisions included for medical care of a scientific nature under the supervision of our county and state medical societies. It is also logical to assume that if a plan or program of medical care functions with satisfaction to all concerned in one county, it would function equally as well in whatever county it may be tried. The basic fundamentals are the same everywhere, as medicine is practiced in an identical manner wherever we go.

Unless something constructive is done by our medical societies concerning this important medico-economic problem, past experience shows that thousands of dollars will be lost to the members of organized medicine and that untold hardships and suffering will be inflicted upon these pensioners of our government.

The old policy of holding medical society meetings merely to "resolute" and to "view with alarm" has never solved these problems. A greater earnestness of purpose and a more militant spirit shown on the part of our medical committees will do much toward bringing about this long needed change.

Artificial Fever Therapy of Syphilis

Walter M. Simpson, Dayton, Ohio (*Journal A. M. A.*, Dec. 28, 1935), points out that the value of artificially induced fever therapy as an adjunct to chemotherapy in the management of neurosyphilis is now firmly established. The one factor common to the wide variety of infectious, chemical and physical methods that have yielded comparable therapeutic results is simple fever production. A simplified, controlled and relatively inexpensive method for fever induction and maintenance (Kettering hypertherm) has been devised. High frequency electric currents are not employed. During the last four years, 383 patients have been subjected to 2,844 artificial fever treatments, without any serious ill effects related to the method of treatment. The frequent observation that the best results occurred when neurosyphilis was treated by combined fever and chemotherapy during its earliest manifestations led the author to apply the treatment to patients with pri-

mary or early secondary syphilis. The results provide evidence that fever therapy may be of great value in early syphilis, particularly when chemotherapy alone appears to be inadequate. The results obtained in the treatment of symptomatic neurosyphilis, asymptomatic neurosyphilis and resistant seropositive syphilis are at least comparable to the results obtained with the more hazardous, time consuming and inconstant malaria therapy. Hospitalization is not a requirement for fever therapy by physical means. The advent of simple and safe methods for the production of artificial fever should stimulate vigorous investigation of the possibility that the time, effort and expense involved in the adequate antisyphilitic therapy may be greatly lessened. There is evidence that artificial fever therapy fortifies and intensifies the action of antisyphilitic chemotherapeutic agents. It would appear that the therapeutic armamentarium of the syphilologist is now provided with a new and powerful weapon.

CANCER SURVEY OF MICHIGAN*

Made by

FRANK LESLIE RECTOR, M.D.†

For several years the American College of Surgeons has reported at the annual Clinical Congress a number of authenticated five-year cures from cancer. These cases have now reached the surprising number of 24,440,‡ distributed as follows:

Cervix	7,453
Breast	6,467
Mouth and lip.....	2,351
Colon and rectum.....	2,275
Fundus uteri	1,103
Skin	1,060
Stomach	756
Ovary	558
Bladder	374
Thyroid	269
Larynx and hypopharynx.....	238
Kidney	159
Vagina, vulva, perineum and urethra.....	128
Upper jaw and antrum.....	127
Bone	93
Lower jaw	90
Prostate	55
Testis	49
Eye	30
Penis	27
Others	778
Total.....	24,440

It is believed that if the present knowledge of cause and cure of cancer was utilized fully by the public and the medical profession, deaths from this disease could be reduced from 30 to 50 per cent. Major emphasis on methods of controlling this disease should be placed on early recognition and early adequate treatment. To accomplish this end education of the two groups most concerned, the medical profession and the public, is necessary.

Education of Medical Profession.—The medical profession should be taught to recognize cancer in its early stages and to give adequate treatment promptly after the case is diagnosed. The end-results rest largely with the first physician who sees the patient. If he is not prepared to give or get the answer, the patient may drift along until all hope of permanent relief is lost.

The public should not be educated to want a service that the medical profession

cannot supply for lack of training and experience or because of lack of hospital facilities. Should this situation arise, the public may demand provision of this service under conditions over which the profession has little or no control. Such action would, unfortunately, take this question out of the hands of the medical profession where it properly belongs.

It is realized that, although the public has not yet taken a serious interest in cancer prevention and control, the time is not far distant when such an interest will be manifest. When this time comes, the medical profession should be ready to assume a larger responsibility in meeting the needs of the situation.

Dr. Gösta Forssell,* Director of the Radiumhemmet, Stockholm, Sweden, says:

"It is the advice of a number of physicians who have had experience with this subject that it is more important to instruct thoroughly all physicians, as well as all those persons occupied with the care of patients, as dentists, nurses, and midwives, as to the early symptoms of cancer, than it is to attempt education of the public directly."

The time necessary to accumulate authentic information on cancer patients is so long, owing to the necessarily protracted period of observation following treatment, that the education of the physician and his preparation for handling such cases must also be extended over a considerable period. The profession should keep this fact in mind and around it organize its educational activities in the cancer field so as to be ready for the larger part it surely will be called upon to play in the future control of cancer as well as to provide the best possible service for such patients at this time.

One requisite for improved cancer treatment is a more adequate training in acceptable diagnostic and therapeutic procedure. While cancer patients constitute but a small percentage of admissions to general hospitals no other disease carries such a high mortality. For this reason cancer assumes an importance out of all proportion to the number of cases seen in general medical

*Continued from February, 1936, issue.

†Field Representative, American Society for the Control of Cancer, New York, N. Y., Clarence Cook Little, Sc.D., Managing Director.

‡Surgery, Gynecology and Obstetrics, February 15, 1935.

*American Journal of Cancer, v. 20, No. 4, p. 863, April, 1934.

practice; and when it is realized that cancer now occupies second place as a cause of death, and that it is assuming increasing importance in the public mind, the necessity for a more thorough knowledge of the disease by the medical profession is evident.

Periodic examination of the apparently well individual by a physician with an eye for cancer offers a most excellent method of detecting the disease in an early and favorable stage. Physicians willing or able to make such examinations are still in the large minority. Because of this many cancers are overlooked until the patient is hopelessly involved. In many cases patients are discouraged by the physician from seeking medical attention until they are positively ill by having their desire for an examination ridiculed when the request is made. It is greatly to be desired that the medical profession will very soon change its attitude on this question and be prepared to render this essential service.

The responsibility of the physician has been outlined as follows:

"Notwithstanding the slowness of scientific progress, the knowledge of cancer is actually growing. The truth is that more advance has been made in detailed knowledge of cancer during the last two or three generations than in all previous time. The details of this new knowledge need not be reviewed item by item. The practical outcome is that, while any complete understanding of cancer has not been reached, the power of medicine to prevent, to diagnose, and to treat cancer has been increased enormously. And the responsibilities of the physician with respect to cancer have increased likewise. On him rests primarily the duty to make sure that the individual patient receives the benefit of the knowledge and the measures that tend to prevent cancer. Briefly, prevention of cancer rests mainly on the avoidance and removal of 'local irritation.' Just how 'local irritation' acts to cause cancer is not known, but there is no doubt that it may lead to cancer. Of the tissues liable to such irritations and chronic inflammations may be mentioned the uterine cervix with its lacerations and 'chronic cervicitis,' the skin and its moles and ulcers, the mouth, the tongue, the mucocutaneous junctions, the breast and the prostate with their chronic hyperplastic inflammations. Here is indeed a wide field for constant preventive efforts by the progressive, cancer-conscious physician.

"Self-evidently, on the physician rests also the main responsibility for the early diagnosis of cancer, on which in turn depends the outcome of its treatment. In connection with this matter, of such vital significance to the individual patient, the physician must consider thoroughly and conscientiously such questions as these: Has he formulated for himself a wise and practical plan for action in all cases in which the question of cancer may arise? Are his regular patients likely to report to him promptly the appearance of any suggestive symptom or sign? If not, why not? Is he fully prepared to take without delay the necessary steps, either by himself or through competent consultants, to secure the final diagnosis in a given case with a doubtful lesion?

Does he fully realize that it may be a fatal error to tell a patient with a suggestive lump or lesion somewhere 'to forget it and come back next month'? Are the services of a competent pathologist readily available and will adequate specimens for microscopic diagnosis reach the pathologist promptly and in the proper state of preservation? Are the special experts to whom he may refer cases for diagnosis and treatment fully equipped in all respects for prompt and efficient service? Does he accept in its full meaning the statement that the treatment of cancer, surgical as well as radiologic, should be entrusted only to those who have adequate skill and experience? These are questions that the physician must answer in a practical and trustworthy manner if he is to meet his responsibility with respect to cancer as now understood. Better control of cancer by prevention, early diagnosis and prompt treatment rests with the physician."^{*}

One method of bringing about a better appreciation of the cancer problem by the medical profession is by giving undergraduate medical students the best possible training in diagnostic and treatment procedures. These students should understand biopsy technic and preferably assist in such work. They should follow tissues through the laboratory and study the microscopic sections. They should be familiar with the history of the case and keep in touch with the follow-up and observation of the patient after treatment. It is believed that every medical school should have an organized tumor service as a part of its teaching equipment.

In speaking on this subject, Dr. James Ewing† has said:

"Medical students carry a heavy burden of fundamental information about the basic sciences, but few of them ever see the various major forms of cancer in their early stages, and gain a competent knowledge of their differential diagnosis. They practice first rate chemistry, physics, and mechanics, but stand without adequate resources before the early diagnosis of the major cause of death. . . . The establishment of adequate opportunities for the study of cancer for undergraduate and graduate physicians is the first step to be taken by those seriously interested in the control of these diseases."

Postgraduate Teaching.—Another necessary element in an improved service is the giving of postgraduate courses and holding of staff conferences on cancer cases. By these means, physicians in active practice can obtain the latest information on this subject which should in turn be translated into an improved service for the cancer patient. No other group is so well fitted to take the leading part in a program of

^{*}The Responsibility of the Physician in the Prevention, Diagnosis and Treatment of Cancer. Editorial, Journal American Medical Association, December 30, 1933, p. 2122.

[†]Causation, Diagnosis and Treatment of Cancer, p. 40-41. Williams and Wilkins Co., Baltimore, 1931.

cancer control as the medical profession, but to merit and maintain this leadership, it must take advantage of all opportunities for further education of its members in this important field of medical practice.

The hospital staff conference offers one of the best opportunities for postgraduate education, as all parties to the diagnosis and treatment of the case are available for consultation and discussion. The pathologist can present evidence disclosed by the laboratory and the microscope. The roentgenologist can interpret the x-ray findings, and the diagnostician can contribute the result of his examinations. From these combined reports, the best treatment of the patient can be developed and all features of the case studied and discussed.

In this connection the following quotation from Dr. James Ewing* is of importance:

"What constitutes a diagnosis of cancer, and by what means can it be accomplished? A diagnosis may be said to have been attained when the clinician has been placed in command of data which will enable him to understand the origin, course, and prognosis of the case in hand. This information must include the results of a physical examination of the patient, roentgenologic study, and of histological study, which reveal the structure of the tumor, the origin of the tumor, its grade of malignancy, and the grade of radiosensitivity. Without all these data, the diagnosis must be regarded as incomplete.

"The physical examination of the patient covers by far the largest field in the diagnosis of cancer. Experienced and alert physicians in general or special practice thus discover the majority of malignant tumors immediately and with considerable certainty, and thereby render to the public perhaps the most important service of practical medicine. On the other hand, careless, incomplete and perfunctory examination of the patient is daily leading to the complete oversight of precancerous lesions and established cancer, to the adoption of unwarranted and unjustified, generally less serious, diagnoses, to the hasty resort to biopsies and exploratory operations, to expensive and unnecessary radiological studies, to unfortunate delays and disappointments, all resulting in increased and unnecessary morbidity and mortality. . . .

"Until the practicing physician learns to keep the suspicion of cancer constantly in mind, knows the early manifestations of the disease, and pursues as an invariable routine, the following up of all danger signs, there will be no great increase in the cures of cancer."

Dr. S. C. Harvey,† Professor of Surgery, Yale University Medical School, has said:

"The necessity for an intensified attack on the problems arising from cancer in man becomes daily more apparent. With more accurate vital statistics,

with the more refined methods of diagnosis, and with the drop in mortality rate as a result of the control of the diseases incidental to infancy and early adult life, the morbidity and mortality from cancer, which strikes at the time of life when a person's experience has matured but when his work is only half done, are becoming appalling. The economic loss is secondary only to the suffering entailed in the individual and in those about him.

"In former years, when the importance of this problem was less apparent, the individual person with the disease was carried in the general load of medical and surgical work with the result that the attack was desultory and ineffectual, and the general opinion was extremely pessimistic as to the outcome in the individual case. However, in the last decade everywhere through the civilized world, the investigation of cancer has been broadened and intensified, and the plan of attack upon its occurrence in man has gradually developed. The antituberculosis crusade of the previous generation has in many ways served as a model and an inspiration, for, although the problems differ in some respects, they are common in that the attack must be concerted and organized and centered about early diagnosis, the provision of adequate facilities, and the development of specialized professional care."

Education of the Public.—The public must be taught the hopefulness of early treatment of cancer so that it will seek treatment during the early stages. The profession must also be educated to recognize early signs and symptoms of the disease and to appreciate the possibility of a cure when the disease is seen in its early stages.

Two periods of delay in securing treatment must be overcome before headway can be made in controlling this disease. The first period is that between the time the patient knows something is wrong and a physician is consulted. A survey made in Massachusetts in 1925 showed that the average cancer patient consulted his physician eight months after knowledge of the first symptoms of the disease, and that cancer patients who had surgical treatment and ultimately died had waited more than ten months after the first symptoms before having an operation.

A survey* of the records of admission to the Barnard Free Skin and Cancer Hospital, St. Louis, in 1930, showed that patients with cancer of the lip waited approximately one year before applying for treatment; breast cancer patients waited ten months; those with cancer of the cervix nearly six months; while those with cancer of the skin waited from 20 to 24 months before seeking medical attention.

In a study of 121 cancer patients seen in Barnard Free Skin and Cancer Hospital in

*Causation, Diagnosis and Treatment of Cancer, p. 41-42, Williams and Wilkins Company, Baltimore, 1931.

†The Yale Journal of Biology and Medicine, page 533, July, 1931.

*Journal Missouri State Medical Association, p. 265, June, 1932.

1932,* the duration of lesions before reaching this hospital was as follows:

Less than 1 month....	2	2 years	18
1 month	3	3 years	7
2 months	8	4 years	2
3 months	9	5 years	5
4 months	9	6 years	3
5 months	5	8 years	1
6 months	5	11 years	1
7 months	2	14 years	1
8 months	5	15 years	1
9 months	3	18 years	1
11 months	1	24 years	1
12 months	14	25 years	1
16 months	1	Not known	5
18 months	7		

No further evidence than the above is necessary to emphasize the need for additional constructive educational work with the public regarding the necessity for early diagnosis and treatment.

In the early stages of cancer there is usually no discomfort or pain; and although there may be visible tumor or ulcer, the condition is often ignored. Each week's delay in treatment following the appearance of symptoms entails the loss of valuable time. In cancer of the breast, it is estimated that for each month's delay in seeking treatment, there is a loss of 16 per cent in the chance for a cure; and as the average patient with breast cancer waits six months before seeking treatment, she practically writes her own death warrant by this delay. Cancer of various sites has an optimum period for cure; and while these periods are not known definitely in many cases, the only safe rule to follow is to obtain treatment immediately after symptoms appear.

The other period of delay in securing prompt treatment is attributable to the physician. Some physicians still assume a "watchful waiting" attitude to see what further symptoms will develop that will aid in the positive diagnosis of the condition, and resort to local medication in the meantime. Too often this delay spells the difference between cure and lingering death from metastases in inaccessible regions. The period of waiting by the patient can be excused in many cases because of ignorance or fear on his part; that of the physician, never.

That improvement is still possible in the early recognition of cancer is seen from a report of the Commission on Cancer of the

Medical Society of Pennsylvania* in which 1,588 records of cancer patients were studied from hospitals in that State in 1933. It was found that local medications were first tried in 13 per cent of the skin cases; no local examinations were made in 7.5 per cent of the uterine cases; no examinations were made in 12 per cent of the rectal cases; and in 13 per cent of the rectal cases, even after local examination, treatment for piles, constipation, etc., was prescribed.

Two outstanding fallacies regarding cancer are held tenaciously by many people. The first of these, that cancer from the beginning is an incurable disease, is also shared by too many older physicians. The second is that the presence of cancer signifies a social disgrace, and for this reason many patients will conceal the disease until it is so far advanced that pain and other symptoms compel its disclosure.

Another group, whose importance is greatly overemphasized by some physicians, is composed of persons whose every abnormality is construed as cancer, a "cancerphobia" so-called. Thinking something is wrong they consult a physician and, on being told that no evidence of disease can be found, seek confirmation of their fears elsewhere. Such neurotic individuals will never die from the *belief* that they have the disease. If they do not worry about cancer, they will worry about something else. Investigations have shown that less than 3 per cent of those applying to certain cancer hospitals have an imaginary malignancy. Surely the other 97 per cent or more should not be dismissed as cancerphobes when their intelligence has directed them to proper medical sources for information about their physical condition.

Those physicians who interpret every patient's inquiry about cancer as a sign of cancerphobia, should remember that cancerphobia never metastasizes and never results fatally. They should be more concerned about the cancerphobia that keeps patients away from them than about the morbidly introspective individual who is always suffering from imaginary illness. Those who know something is wrong, and delay seeking medical attention for fear they may be told they have cancer, are a serious problem and compose a large group of the hopeless cases.

The public should be taught to focus its

*Data supplied by Miss Eleanor Cockerill, social worker, Barnard Hospital, St. Louis, Missouri.

*Pennsylvania Medical Journal, July, 1934.

attention on the *beginning* of cancer rather than its *end*. The public and medical profession should become familiar with the signs and symptoms, the "danger signals," of early cancer. These are:

A lump that persists in any part of the body, particularly in a woman's breast.

A sore, especially about the face or buccal cavity, that does not heal within the normal healing period.

An unnatural blood-stained discharge from a natural body orifice, particularly the vagina, bladder, rectum, or nipple.

Change in size or color of warts and moles.

Persistent indigestion with loss of weight.

If the public sought medical advice when one or more of these symptoms appear, and if the medical profession always had cancer in mind when examining such a patient, a large number of cases would be discovered in early stages when there is most hope for a cure.

Years ago the majority of cancer patients were seen in late stages. More recently the value of early treatment was established. Today prevention of cancer is being discussed as the significance of certain abnormalities becomes known. A group of mildly pathologic conditions of widespread distribution in the body are now looked upon as important precancerous conditions. Leukoplakia of buccal or vaginal mucous membranes, chronic cervicitis associated with cervical lacerations at childbirth, dry scaly keratoses of exposed skin areas, such as face and hands, pigmented moles and warts, if subject to irritation by clothing or other friction, are all considered potential sources of malignant degeneration as the individual grows older. One or more of these abnormal conditions may exist for years without showing suspicious changes, but as cancer in these tissues often is preceded by a period of known mild pathology, the physician cannot ignore these significant lesions of a precancerous character. Their removal is now considered a desirable preventive measure. As a rule, they respond readily to appropriate treatment.

The psychology of the cancer patient is an important factor in his treatment. No other disease carries the load of depression and discouragement that cancer does. The feeling of hopelessness is difficult to overcome in many cases. Often this depression is due to the patient's ignorance of his true condition. He is not told the nature of his ailment and, as time goes on with slow improvement or aggravation of the disease, his

morale suffers. The policy of telling patients that they have cancer is spreading. Reports from hospitals and clinics where frankness prevails between physician and patient, are that such frankness is appreciated and the patient is more coöperative. Little headway in taking the fear out of cancer can be expected as long as physicians continue to surround the subject with mystery and secrecy and refuse to discuss it openly as other diseases are discussed with their patients.

The public is becoming so familiar with the symptoms of cancer that many people discuss them intelligently. In certain communities rather positive public opinions are held regarding the value of different therapeutic measures. These opinions doubtless are influenced largely by the attitude of local physicians toward the problem.

In the last analysis, the best educator in the cancer field is the cured cancer patient. There are such individuals in each community whose interest and experience doubtless could be utilized in bringing to the attention of others the facts about the treatment and cure of this disease.

Cancer a Public Health Problem.—Cancer is claiming increased attention as a public health problem. Eleven states, Colorado, Delaware, Florida, Kansas, Louisiana, Mississippi, Montana, Nevada, Oregon, Washington and Wisconsin now have laws, or departmental regulations having the effect of law, making it a reportable disease. Adequacy of reporting varies considerably in these states, and in some the law is practically a dead letter.

Some states have passed legislation on the subject of cancer control. In this connection certain provisions in the Massachusetts law placing the cancer program under the State Department of Health may be of interest. Section 2 of chapter 391 of the Acts of 1926 of Massachusetts provides:

"The department shall establish and organize cancer clinics in such parts of the commonwealth as it may be most advantageous to the public health and shall conduct such clinics with or without co-operation of the municipalities, local physicians, or other agencies."

Article XVIII, section 346 of the public health law of New York, defining the functions and activities of the State Institute for the Study of Malignant Diseases, states that

"The Institute shall conduct investigations of the cause, mortality rate, treatment, prevention and cure of cancer and allied diseases. There may be re-

ceived free of charge in its hospital for study, experimental or other treatment, cases of cancer and allied diseases. The commissioner of health shall publish from time to time the result of its investigations for the benefit of humanity and he shall, from time to time, collate its publications in a scientific report for distribution to scientific bodies and to medical scientists and qualified members of the medical profession."

Section 349 of this same Article provides for the Division of Cancer Control as follows:

"There is created in the state department of health a division of cancer control, of which the state institute for the study of malignant diseases shall be a part. The commissioner of health through the division of cancer control shall continue to conduct investigations of the cause, mortality rate, treatment, prevention and care of cancer, and allied diseases, including the nature and extent of the facilities available in the several counties and cities of the state, for the diagnosis and treatment of these diseases, and shall cooperate with local health authorities, physicians, hospitals, clinics and voluntary associations, in the development of suitable facilities for the diagnosis, treatment and control of cancer."

The Division of Cancer Control of the Detroit Department of Health has been discussed previously.

With cancer mortality rising throughout the country, it would seem desirable for health departments to contribute so far as resources permit to a study of problems associated with this disease. More accurate causes of death on death certificates might well be insisted on. Doubtless many deaths among the aged are in reality due to cancer, even though the immediate cause of death may be noncancerous. A greater number of autopsies, especially on elderly patients, would undoubtedly reveal cancer where it was not openly evident. Many physicians refrain from autopsies on the aged when they urge them on others. By educational activity and cooperation with medical and

hospital groups, health departments can stimulate a wider interest in autopsies and more accurate death certificates, in time resulting in more accurate antemortem diagnoses.

By bringing the significance of early signs and symptoms of cancer to public attention through department publications and other educational channels, as the press and radio, health departments can make a definite contribution to the treatment of cancer in early and hopeful stages, and to its prevention. Economic problems concerning both the patient and his family require attention from medical, health, and social welfare groups. The health department can contribute to the solution of these problems by cooperating with other interested groups and agencies.

Official health agencies usually have available facilities for obtaining much factual information about cancer. Although some officials and students in the public health field may feel that contact with the cancer problem, except in its broadest aspects, is outside the province of a health department, it is believed that such departments have, or should have, a keen interest in any disease responsible for 10 per cent or more of all deaths. Just because the cancer problem has not been considered of importance in health department activities is no reason why, with increasing knowledge about it and changing conditions under which it is being handled, such departments should not be identified with prevention and control measures. Details of participation in such work will vary with the communities in which the work is done and cannot be indicated until full information is available about local situations.

(To be continued in next issue.)

Too Many Claims Spoil The Medicine Man's Game

Although not nearly so common as they used to be, there are still occasional quack medicine vendors who stick to the old and illegal labels that claim for their nostrums curative powers over at least a good part of the ills and ailments that affect mankind.

Recently, for example, drug inspectors picked up samples of what were labeled "Devonshire's Earth Salts," marketed by F. S. Powers & Co., Crystal Lake, Ill. These were offered as a treatment for the following assortment of diseases and conditions: Pneumonia, cancer, diphtheria, typhoid fever, kidney

and bowel trouble, appendicitis, intestinal worms and tape worms, locomotor ataxia, nervous disease, rheumatism, stomach trouble, skin diseases, malaria, high blood pressure, boils, abscesses, goiter, tumors, stomach ulcers, chills, colds, bronchitis, snake bites, delirium tremens, diabetes, venereal diseases, heart trouble, sterility in men and women, and also for "other disease conditions."

The nostrum got into interstate commerce and that brought it under the Federal Food and Drugs Act which penalizes sweeping claims not founded on fact and contrary to medical experience. A Federal court fined the seller.—Press Service U. S. Dept. of Agriculture.

President's Page

MORE INFORMATION TO THE PEOPLE

THE *Saturday Evening Post* of January 26, 1936, contained a thought-provoking editorial on "Compulsory Health Insurance" which stated in part:

"Unhappily, the experience of nations which have given such systems a thorough try-out is anything but encouraging.

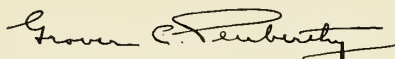
"According to a study of conditions in England, in 1933, made by the *London Times*, the time lost through sickness by insured workmen averaged twelve and one-half days per man yearly, an aggregate of twelve months' work for 558,000 persons. Before compulsory insurance went into effect, the loss was only nine days; the increase under the insurance scheme being more than 38 per cent. Germany has had half a century of experience with insurance against sickness, and in those fifty years the time lost through illness has trebled. The comparison with American figures is striking, for the average loss of time by our own workmen is only about six and one-half days a year, and the figures have been stationary at that level for a quarter of a century."

Why did the *Post* dedicate valuable space to this subject? First, because it is not in favor of socialization; second, because it was supplied with the facts (by Dr. Frederick E. Sondern, president of the Medical Society of the State of New York); third, because the *Post* felt this information was *news* to many people. While these facts and many others touching the social aspects of sickness are very well known to the medical profession—some will say—they are not part of the general knowledge of the public. We are grateful to the *Post* for awakening us to our duty: the dissemination of more information to the people.

The State and county medical societies are encouraging better physician-public contacts. The doctors of this State know hundreds of people such as editors, influential citizens, public office holders, civic leaders, teachers, et cetera, whose influence on other thousands is daily exercised. Each and every physician must learn *all* the facts concerning socialization of medicine and its dire results, and pass on this information to the key people in his community. Frequent contacts with the public are absolutely necessary.

Doctor, a package of twenty-one booklets on the social aspects of medicine will be sent to you or to anyone you designate by merely writing your State Medical Society. In a few weeks, you will receive a brief on this subject to be followed later by a brochure, both pamphlets prepared by the Michigan State Medical Society.

The people must have an awareness of *all* the facts about state medicine, if they are to gain a proper evaluation of this much propagandized topic. One important phase was covered by the *Post*, thanks to Dr. Sondern. Many other arguments against socialization remain. The public must learn of them, thanks to you.



†Reprinted by special permission from *The Saturday Evening Post*. Copyright 1936 by The Curtis Publishing Company.

THE JOURNAL

OF THE

Michigan State Medical Society

PUBLICATION COMMITTEE

A. S. BRUNK, M.D., Chairman.....Detroit
 HOWARD H. CUMMINGS, M.D.....Ann Arbor
 J. EARL McINTYRE, M.D.....Lansing

Editor

J. H. DEMPSTER, M.A., M.D.
 5761 Stanton Avenue, Detroit, Michigan

Medical Secretary

C. T. EKELUND, M.D.
 35 W. Huron Street, Pontiac, Michigan

Business Manager

Wm. J. BURNS, LL.B.
 2642 University Avenue, St. Paul, Minnesota
 or
 2020 Olds Tower, Lansing, Michigan

MARCH, 1936

*"Every man owes some of his time to the up-
 building of the profession to which he belongs."*

—THEODORE ROOSEVELT.

EDITORIAL

A PHARMACOPŒIA FOR TODAY'S NEEDS*

Many physicians have felt the necessity of an up-to-date revision of the U. S. Pharmacopœia. This feeling extends particularly to the elimination of drugs that are next to useless. Much complaint has been expressed regarding the alleged neglect in the manner in which therapeutics has been taught in many of our medical schools, a fact perhaps due largely to the influence of the late Dr. Osler, who was inclined to disparage drug therapy. He doubtless had his reasons. The proper course, perhaps, lies between the extremes of "therapeutic nihilism," and the employment of drugs in an almost indiscriminate way. However, today there is not the same excuse for the abandonment of drug therapy. What is needed is rational therapeutics. Within recent years, many medicinal agents have been tried and tested by clinical research. As Mr. Cook declares: "Tremendous advances have been made in the efficiency and specific character of many medicines and the thousands of trained investigators in colleges and universities, in heavily endowed

medical research institutions and in the research laboratories of a few of our pharmaceutical and chemical manufacturing firms give much promise for the future."

The committee in charge of the U. S. P. revision has aimed at including drugs of purity in simple form which can be combined by the physician to meet the special requirements of each patient. Physicians, however, in many instances, prefer the combinations put out by skilled pharmacists. Accordingly, the revision committee have devised official preparations in the U. S. P. or in the National Formulary. The committee also advises the use of scientifically correct and usable titles in spite of their apparent cumbersome character. The use of these titles goes a long way to prevent self-medication with all its attendant evils. The independent and scientific position of the United States Pharmacopœia has always enabled it to command the coöperation of scientific workers throughout the country, says Mr. Cook.

The speaker emphasized the new program of the committee providing for "interim revisions." Hitherto, revisions of the U. S. P. have been, for the most part, confined to the ten-year period. Studies are now being undertaken on vitamins and anti-anemia products. A group of clinicians and biological experts will make a special study of digitalis. Among other studies announced are those in connection with pepsin standards and assay, and aconite and ergot assays. Soaps and antiseptic solutions, ointment vehicles, the extraction and preservation of drugs.

A number of valuable products cannot be included in the U. S. P. owing to the fact that they are patented. They may not be included without the consent of the owner of the patent. Insulin cannot be included until 1942, the year of the expiration of the patent. "When a product was controlled by and its distribution limited to one firm, even though consent to include it in the U. S. P. has been granted, it was believed unwise to admit such substances." (Cook.)

The committee favors, in fact advises, exhibits of U. S. P. and National Formulary preparations before medical groups so that physicians may become familiar with the appearance of these medicinal agents.

The medical profession will welcome the work of the U. S. P. revision committee in

*The title of an address by E. F. Cook, Chairman of the U. S. P. XI Committee of Revision before the New York Branch of the American Pharmaceutical Association, January 13, 1936.

their progressive effort to keep abreast of pharmaceutical research by interim publication of results.

PERSONS WHO DO NOT SEEK MEDICAL CARE

It has been said time and again that with more than 125,000 doctors in the United States, with hundreds of splendidly equipped hospitals, and thousands of nurses out of employment, medical care is still inadequate. We believe, however, that medical care has been quite adequate and the quality of a very high order for those who seek it. There is a large element in the population of any country in need of medical care who do not seek it and would not accept it were it furnished free. The reason for this is psychological rather than financial, or the fact that competent medical care is not within reach. Many people refuse to consult a doctor through fear. While for the majority of people the doctor is a symbol of health and hope, and one might say life itself, for a considerable number he is the symbol of death. The person who suspects the possibility of cancer will defer consulting a physician for fear that he may receive bad news. True, also, of many men of affairs who wish to keep at their work and will not consult a physician, fearing the probability of diagnosis of cardio-vascular disease. Under the set-up of compulsory health insurance, this class would not be reached. They would be called upon to pay for medical service which they, themselves, for reasons beyond their control, would not accept.

Then there is the matter of fear of pain, and here the practice of the dentist is probably affected more than that of the medical profession. How many people, perfectly able to afford dental care, go about with carious teeth and apical abscesses, content to put up with a menace to health so long as it does not cause actual pain?

And then there is the third class, indifferent to their own personal condition as well as to the health of their dependents. Preventive medicine or any other kind of medicine means nothing to them unless there is pain or hemorrhage to spur them into seeking relief.

When we exclude the groups here mentioned who do not want medical care at any price, it is safe to say that under the

existing conditions few, if any, have suffered from actual want of the commodity which the medical profession is able to provide.

The problem of distribution has been taken care of with a fair degree of efficiency. It might even be accomplished, perhaps, more efficiently; we do not, however, believe that this would result by any of the proposed methods of socialization. Better medical care can come only through improvement of the personnel of the medical profession, by which we mean better educated and better trained doctors. No state in the union, however, has accomplished more along this line than Michigan with the postgraduate set-up between the University and the Michigan State Medical Society as well as teaching clinics that are held in various medical centers throughout the state.

FRACTURES

The subject of fractures is one of increasing importance when we consider not only industrial injuries and those due to carelessness in driving automobiles, as well as the injuries which are sustained in the home, which, surprising as it may seem, by and large, are almost equal in number to those which happen in industry. According to Plummer, quoted by *Surgery, Gynecology and Obstetrics*:

"No subject in the field of surgery is receiving more intelligent and careful attention at the present time (than fractures). The lethargy of early decades of Listerism has been replaced by notable vitality: The former stepchild of surgery refused to remain in that status and is now one of the most vocal members of the family."

Among the principles stressed by surgeons in both Europe and the United States is the need for early reduction as well as attention to the soft tissues. It goes without saying that sufficient force to break a bone must, of necessity, cause damage to such structures as nerves, blood vessels, and muscles. Besides immediate reduction, the importance of restoring the function as early as possible is also emphasized in the modern treatment of these injuries. Many advocate, especially in cases of closed reduction, the unpadded plaster cast, followed as soon as possible by active use of the injured part. The employment of local anesthesia is coming into acceptance in both Europe and the United States. The importance of aseptic technic is emphasized.

There is a general agreement that fractures such as that of the patella and of the olecranon process, the open method of reduction is the method of choice. In fractures of the long bones, if the open method is employed, it should be used only by surgeons especially experienced in bone surgery who are fully cognizant of the strictest asepsis necessary.

In a comprehensive review of the whole subject of fractures, Stimson* concludes:

"If it were necessary to characterize in a single word the trend of fracture treatment during the past two years, that word would be 'wire.' Emphasis has been laid on first-aid treatment, on the importance of the soft parts, and on the need for expert handling of operative cases, but the use of Kirschner wire, especially for traction, with and without plaster, has been enthusiastically accepted in many parts of the world. It will be of great interest to see where the pendulum will come to rest."

DR. ARTHUR D. HOLMES

The passing of Dr. Arthur D. Holmes of Detroit on February 20 removes one of Detroit's best known physicians. He was not only one of the best qualified in his specialty, pediatrics, but he had an unusual business sense as well, from which the Wayne County Medical Society benefited. Those who began the practice of medicine more than a quarter of a century ago remember the Wayne County Medical Society had no abiding place. At times it met in one of the rooms of the county building. When there was an overflow, the auditorium of the old art institute on Jefferson Avenue was pressed into service. Meetings of the various special groups met in offices or in the homes of their members. During these years the membership was somewhat timid about taking on such a financial obligation as a permanent home. Through the efforts and enthusiasm of Dr. Holmes, however, the property on 65 High Street East was purchased and fitted up as the society's headquarters. Dr. Holmes was the moving spirit during those earlier years and the society had the benefit of his business wisdom until the late 20's.

Of a quiet, kindly disposition, Dr. Holmes had a wide circle of friends. Though he retired from the active practice of his profession several years ago, his valuable work and influence with the local medical society will be long remembered.

*Stimson, B. B.: Surgery, Gynecology and Obstetrics, January, 1936.

MEDICAL MUSEUMS

In this number of THE JOURNAL of the Michigan State Medical Society appear two communications on virtually the same subject. Neither writer is aware of the object sought by the other. The objects vary to a certain extent. Dr. Collier's plea is for a museum collection of old—archaic is hardly the word—instruments and appliances at one time but no longer being used. The value of such a collection is enhanced as time goes on.

Dr. Amberg's plea is for a Museum of Hygiene for Detroit. His temple of the muses is somewhat broader in its scope inasmuch as it would include as he intimates "anything which pertains to healthy living, proper housing, ventilation, lighting, heating, information concerning proper cooking, proper household utensils, in short, anything pertaining to proper living." He would also include a section for the exhibition of pathological specimens for physicians only.

There is enough variety in the pleas of these two letters so that they may both be considered together harmoniously. Let us hear what others have to say on these subjects.

PREVENTIVE MEDICINE

Under the heading "Reward of Vigilance" the *Detroit Free Press* comments upon the fact that Detroit has been declared by the United States Public Health Service to be the healthiest big city in the country. The city has had the lowest death rate and also had the lowest contagious disease rate of any competing city.

The monthly contribution of the Michigan Department of Health for February reports a similar condition for the state of Michigan as a whole. In this number of the JOURNAL, is presented a statistical account of public health throughout the United States.

All this is very gratifying and it all goes to prove the efficiency of the medical profession. So far as infectious diseases are concerned, the general practitioner is the soldier on the foremost battle front. If he falls down in his duty the conditions reported might soon be very different. All of which goes to show the extent to which preventive medicine is being practiced by the medical profession as a whole.

SOME SACRIFICE

"It may be necessary and expedient in order to bring good medical service within reach of the average citizen to extend the already existing public medical set-up to include laboratories equipped for clinical tests and x-ray photography, providing free service for those unable to pay and a small cover fee for those able to shoulder at least part of the expense. Socialize, if you will, the mechanical and chemical side of medical practice. Doctors care little about it if they, themselves, are but left out of the picture." Quoted from an article by Dr. B. R. Shurly and Dr. E. S. Bullock in the *Journal A. M. A.*, January 25, 1936.

We are reminded of a story told long ago by Artemus Ward. During the Civil War a certain citizen was reminded of his duty to enlist in the army for the good of the cause. He was told that he must be prepared to make some sacrifices. He replied that he was willing to sacrifice all his wife's near relations.

HEALTH OF THE NATION

We print herewith the Surgeon-General's report to Congress of the health conditions which prevail throughout this country for the calendar year ending June 30, 1935. This report is significant considering the fact that it covers one of the depression years.—*Editor.*

In his annual accounting of the public health of the United States, the Surgeon General of the United States Public Health Service, reporting on the activities of his organization for the 137th year of its existence, states that health conditions in general remained good during the year ended June 30, 1935. For the calendar year 1934 the preliminary death rate was 10.9 per 1,000 population, slightly higher than in 1933, in which year the rate was 10.5, but lower than any recorded rate earlier than 1932, when the death rate was 10.8 per 1,000.

It is of especial interest to note that the birth rate increased in 1934, being 3 per cent higher than in 1933; which, being stated in another manner, means that there were about 94,000 more babies born in the United States in 1934 than in 1933. The birth rate in this country has been decreasing for several decades.

The infant mortality rate, that is, deaths of infants under one year of age per 1,000 live births, increased slightly in 1934 as compared with 1933, the rates for these years being 59.9 in 1934 and 58.2 in 1933; but the 1934 rate was lower than the rate for any year earlier than 1932.

The death rates from typhoid fever and diphtheria for the calendar year 1934 were both 3.3 per 100,000 population. For comparison in showing what has been accomplished in the past thirty-four years, in 1900 the death rate for typhoid fever was 35.9 per 100,000 and the diphtheria death rate was 43.3. In other words, there were 91,000 fewer deaths from these two causes in 1934 than would have occurred if the 1900 rates had prevailed. The decrease in the deaths from these two diseases is an outstanding example of the results of the application of modern public health science.

The tuberculosis death rate continued to decrease, and the 1934 rate of 56.2 per 100,000 population was the lowest ever recorded by the Public Health Service.

Neither cholera nor yellow fever appeared in the

United States during 1934, but about 1,000 cases of cholera were reported in the Philippine Islands.

In May, 1934, an outbreak of poliomyelitis (infantile paralysis) occurred in California, and reached its peak in June. For the year the incidence of this disease was higher than usual in the Pacific Coast States and in the North West. In the early summer of 1935 an outbreak of poliomyelitis occurred in North Carolina and Virginia, and later increased incidence of the disease was noted in most of the New England States, New York, New Jersey, Michigan, Kentucky, and some of the other States.

An unusual occurrence of dengue fever was noted in some of the Southern States in 1934, with about 2,000 cases reported in Florida, 1,962 cases in Georgia, and 1,072 cases in Alabama. The actual numbers of cases occurring were much larger, as many cases of dengue fever are not reported.

The incidence of measles increased in 1934 as compared with 1933, and this increase continued into 1935. For the first thirteen weeks of the latter year, 650,000 cases were reported, as compared with an average of 387,000 for the corresponding period of the seven preceding years.

The death rate from pellagra, which has been decreasing since 1928, continued the decline through 1934, the rate being 3.2 per 100,000 population as compared with 3.6 in 1933 and 3.9 in 1932.

A fatal case of bubonic plague occurred in Lake County, Oregon, in May, 1934, and a case was reported from Tulare County, California, in June. This disease, which is also a disease of rodents, is propagated on the West Coast principally in ground squirrels and rats, and is transmitted from rodent to rodent and from rodent to man by infected fleas. The extension of the infection northward into Oregon and Montana was noted for the first time in 1934. Rodents carrying this infection were found in California, Oregon, and Montana during the year.

A total of 5,371 cases of smallpox was reported to the Public Health Service for the calendar year 1934, the smallest number for any year since records have been kept. In ten States and the District of Columbia no case of smallpox was reported in 1934.

During the year 254,551 cases of syphilis and 161,810 cases of gonorrhea were reported to the Public Health Service by State health departments. That these figures do not represent the true conditions regarding the prevalence of venereal diseases, however, is shown by special surveys, which indicate that there are approximately 518,000 new cases of syphilis in the United States each year and 1,555,000 cases of gonorrhea. The importance of extensive and concerted effort on the part of all health organizations in combating these diseases is emphasized, if progress is to be made against them.

In its work of protecting the health of the people of this country, the Public Health Service is constantly engaged in research regarding the causes, means of propagation and spread, and means of preventing diseases of mankind, keeps currently informed regarding the prevalence of disease throughout the world, and stands guard at our ports to prevent the introduction of diseases from abroad. It might well be said that *eternal vigilance is the price of public health*. So well has this vigilance been maintained at our ports that not for many years have any of the quarantinable diseases been imported into the United States from foreign countries, in many of which such diseases occur in large numbers each year.

During the calendar year 1934, nearly 300,000 cases of cholera were reported in Asia and the adjacent islands, with nearly 150,000 deaths, while

plague caused 98,000 deaths, mostly in Asia, but plague was present in nearly all parts of the world. Preliminary reports showed that 65,000 deaths occurred from smallpox, mostly in Asia, Africa, and the American Continents; very few cases of this disease were reported in Europe.

Typhus fever showed an increase during 1934 over the two preceding years, with about 100,000 cases, according to preliminary reports. The greatest incidence was in Eastern Europe, but cases were reported from all sections of the globe. The disease caused 3,377 deaths in Chile and many deaths in Mexico.

Yellow fever, the scourge called "Yellow Jack" and so much dreaded only a little more than a quarter of a century ago, was reported in countries of South America and Africa, but no case occurred in the United States.

In guarding against the importation of dangerous diseases, medical officers of the Public Health Service examined 730,777 alien passengers and 696,562 alien seamen at various ports of the United States, and 35,978 applicants for immigration visas at American consulates in foreign countries. These officers also inspected 15,262 vessels and 1,924,556 persons at continental and insular ports and 168 vessels and 45,939 persons at foreign ports prior to departure for the United States or its dependencies. Of 4,081 arriving airplanes, carrying 34,135 persons, 2,636 planes with 30,249 persons were inspected at airports of entry. The remaining planes arrived at ports at which no medical officer of the Public Health Service was available for duty. During the year 1,147 vessels were fumigated at United States ports because of the presence of disease on board or for the destruction of rats to prevent the introduction of plague.

The International Sanitary Convention for Aerial Navigation, opened for signature at The Hague on April 12, 1933, and signed on behalf of the United States on April 6, 1934, was ratified by the United States on June 13, 1935. It became effective on November 22, 1935.

In its research work the Public Health Service covers a broad field of investigation into the cause and prevention of disease, both at the world-famous National Institute of Health and at various field laboratories. Some of the subjects included in research are cancer, encephalitis, poliomyelitis, heart disease, leprosy, malaria, psittacosis or parrot fever, Rocky Mountain spotted fever, tularemia, tick fever, venereal diseases, industrial diseases, air contamination, stream pollution, child hygiene, dental conditions, and milk sanitation. At the National Institute of Health specialized studies were conducted relating to pathology and bacteriology, prophylaxis and therapeutics, pharmacology, zoology, and chemistry.

During the year a study was begun of the possible value of two vaccines used for the first time on human beings to produce immunity against the dreaded infantile paralysis, and the findings will have an important bearing in determining whether or not the use of such vaccines is safe and should be continued. Laboratory experiments showed that monkeys treated intranasally with sodium sulphate solution were rendered resistant to intranasal installation of poliomyelitis virus. The outbreak of this disease in California in 1934 was mild as to severity and showed a tendency to attack older children and young adults to a greater extent than in former years.

The net production of Rocky Mountain spotted fever vaccine in the fiscal year, 284.4 liters, was 36.6 liters more than in 1934, and about one-fifth of the supply was furnished to the Emergency Conserva-

tion Corps in the infected areas. Cases of this disease were reported for the first time in Illinois and Oklahoma, and new endemic areas were reported in Montana, Idaho, and California. The disease is now known to be present in 34 States.

Studies of various phases of the relation of sickness to the depression were continued, and great differences in sickness rates were found between persons on relief and those not on relief.

Further studies on growth and the economic depression showed that there were no striking differences between the weight of children in 1934 as compared with the average weights from 1921 to 1927.

Over 1,500,000 dental examinations of children in 26 States were compiled, the data including items relating to present dental needs and to past dental treatment, with the children classified according to color, sex, age, and size of area in which they live.

In the milk investigations on the bacteriocidal treatment of milk cans by hot air it was found that a temperature of 170° F. for 30 minutes devitalizes all milk-borne pathogenic organisms.

Further work was done in the prevention of fatal bichloride of mercury poisoning, and further success is reported in the use of formaldehyde sulfoxylate as an antidote, discovered by Public Health Service research workers last year. Of 30 human cases treated in Washington (D. C.) hospitals, 27 patients survived, and in 26 there were no harmful results following the administration of this drug.

The determination of the pellagra-preventive value of seven different foodstuffs, completed during the year, showed that chicken, rabbit, and pork shoulder were good sources of the pellagra-preventive vitamin, cottonseed meal and evaporated peaches relatively poor sources, and that prunes and canned beets contained little or none of this pellagra-preventive substance.

The first Federal Narcotic Farm located at Lexington, Kentucky, was dedicated and opened for admissions on May 29, 1935. This institution is for the care and treatment of addict prisoners from Federal penal and correctional institutions and for those narcotic addicts who voluntarily apply for treatment. It has 1,000 beds. The other Narcotic Farm will be located at Fort Worth, Texas, and it was expected that the contract would be let during the latter part of 1935.

The Public Health Service continued to furnish and supervise the medical services for Federal penal and correctional institutions, the inmate population of which was 15,059 on June 30, 1935, an increase of 3,205 as compared with the preceding year. The Public Health Service also had charge of the United States Hospital for Defective Delinquents at Springfield, Missouri.

In addition to the strictly public health functions of the Public Health Service, the conduct of the Narcotic Farms, and the medical service furnished Federal penal institutions, *hospital care and outpatient treatment were provided for American seamen and other beneficiaries at 154 ports, where 332,034 accredited persons applied for treatment or other medical service during the fiscal year 1935. In this work 1,801,768 hospital days and 1,150,981 outpatient treatments were furnished to legal beneficiaries at a per diem cost of only \$3.31.*

In these comprehensive and far-reaching activities of the Public Health Service devoted to the protection of the health of the people of the United States, the Surgeon General has a mobile corps of commissioned officers available for duty in any part of the world, and various scientific, technical, and other personnel—a total of 6,342 persons, not including about 4,600 State and local health employees who collaborate in the collection of morbidity and

mortality statistics. With this personnel the public health of this country is being constantly protected. The Surgeon General states that the care of the public health is an essential function of government, that natural and material resources of any area cannot be fully developed unless health conditions are safe, and that there can be no truce in the warfare against disease.

OUR ESTATE

It's aw'fu' news we're hearin' noo,
About th' theory o' th' state
Gaen intil debt some billions mair,
An' nae ane kens oor fate.

Ye ken we think we should build oop
A fairly guid estate,
Bit noo th' state builds oop a debt
At a tremendous rate.

It looks as though there'll trouble be
When we'll reach auld St. Peter's gate,
He'll shake his heid an' say, "Go 'way,
Yer debts are mair'n yer estate."

WEELUM.

Tribute to Dr. W. H. Marshall of Flint

In the past Dr. Marshall has been conducting clinics and C.P.C.'s in Hurley Hospital. His activities have been followed with keen interest by the members of the Society. His timely remarks and mature judgment were of great benefit, particularly to his younger colleagues. His wealth of knowledge on any phase of medicine was admired by all.

Many of us feel a great loss in Dr. Marshall's withdrawal from these activities—we speak from a selfish point of view—because we want him to continue, so that we may benefit from his wide experiences.

Little did we realize the effort and time it required to work up the material to be presented. It was taken for granted that it was worthy of attention if it was prepared by Dr. Marshall. There ities. We want Dr. Marshall to lead these C.P.C.'s and clinics; however, if he feels that he can not take entire charge, we need his able counsel for the successful continuation of these clinics.

We want him to know that we appreciated his efforts in the past and regard him as a wise counsellor and an able teacher.—*Bulletin Genesee County Medical Society.*

Keep Your House in Order

The urge to sue physicians continues, some 35,000 suits having been brought within the past few years. Ninety per cent of these suits had no merit and never got beyond the mere docketing. About seven per cent were won by the profession, and approximately three per cent were lost. This is an amazing revelation and should hearten us considerably, but there are three details every physician should attend to: pay his medical society dues promptly and thus be entitled to the medical defense of his society; keep in force his medical indemnity insurance; and conduct his practice so skillfully and circumspectly that no grounds for suit may be found. Even then we will be exposed to the "nuisance suits" brought in an effort to prevent the doctor from collecting a legitimate bill, to provide an ambulance-chasing lawyer with a job, or to provide the improvident with some easy money. The lesson is that he who keeps his house in order need fear no visitor.—*Delaware State Medical Journal.*

BE PREPARED FOR YOUR CANCER PATIENT

CANCER OF THE MOUTH*

Carcinoma of any part of the body produces fear and distress to the patient, but carcinoma of the tongue and mouth is particularly horrible because of the disfigurement, foul odor, the ugly fungoid mass and the loss of function.

It is not difficult to understand that the diagnosis of cancer involving deep-seated organs is frequently made at an advanced stage of the disease and, therefore, treatment is comparatively inefficient. It is a regrettable fact, however, that accessible cancers are not recognized earlier and treated more efficiently. The chief accessible locations are the mouth, lip, skin, uterus, rectum and breast.

Of the 4,000 people who died of mouth and lip cancer in the United States each year, at least one-half could be saved if our present knowledge of cancer diagnosis and treatment were properly applied. There is no part of the body where the cause and effect of cancer production can better be visualized. There is no better place to watch the progress of pre-existing carcinogenic lesions. Surely, it cannot be truthfully said that the cause of cancer is unknown when nature has furnished us with so excellent a laboratory in which to observe cancer development. Our observations teach us that preventive medicine should play an important rôle in cancer control.

Cancer of the lip occurs invariably at the mucocutaneous junction of the lower lip and can usually be associated with prolonged mechanical irritation. Any lesion of the lip which does not heal promptly should arouse suspicion of malignancy and doubt should be removed by means of biopsy and microscopical examination. The pathological report will give not only the diagnosis of malignancy or non-malignancy but will include the degree of malignancy and sensitivity to radium. The pathological examination, together with the size of the primary cancer and the presence or absence of cervical node involvement, will determine

*The fourth contribution by the Cancer Committee of the Michigan State Medical Society.

whether treatment is to consist of surgical excision or destruction by radium and deep x-ray. Chemical cauterization is to be condemned and electrodesiccation is usually inadequate.

That carcinoma of the mouth is about eight times as common in males as in females is probably largely ascribable to the difference in oral hygiene in the two sexes. In India and Ceylon, however, where women chew bettle leaves and nuts, the incidence of mouth cancer is higher in women. Jagged teeth, irritating dental appliances, tobacco and syphilis are the chief causes of cancer of the tongue and cheek. Leucoplakia of the tongue and mouth is generally recognized as a precancerous or potentially malignant lesion and precedes cancer in this location in 10 to 50 per cent of cases, according to various authors.

The principle sites of intra-oral cancer are the lateral borders of the anterior two-thirds of the tongue, buccal surface, floor of the mouth, tonsillar areas and pharynx. In the mouth the usual signs of cancer are unreliable and, therefore, any chronic swelling or erosion should be regarded with suspicion. Here, again, the biopsy is indispensable. A positive blood test for syphilis in the presence of a possible malignant lesion should not be allowed to rule out the diagnosis of cancer, or to delay treatment.

The dentist is in a much better position to view and detect early cancer of the mouth than the physician and he should be encouraged to be alert for the recognition of oral cancer as well as cancer of the nares and sinuses. Physicians should exert their influence on their dental associates and persuade them to accept a large part of the responsibility, not only for the recognition, but also for the prevention of cancer of the mouth. It has been said in exaggeration that the time to cure cancer is before it begins and this location offers the best opportunity to apply cancer prevention.

Associated lymph node involvement is difficult to interpret because cervical adenopathy may be merely inflammatory hyperplasia due to infection in the primary lesion. There is little correlation between the size of the enlarged lymph node and the involvement by neoplastic infiltration as shown by microscopic examination.

Several series of reported cases show that the average case of carcinoma of the mouth consults a physician within three months

after the appearance of the lesion, but that in the average case there is an additional three months delay before adequate treatment is instituted. This delay can be eliminated by greater alertness and more decisive action on the part of the physician and prompt treatment will result in a much higher percentage of cures. In treatment of cancer of the mouth generally, radium and deep x-ray therapy are the chief weapons but in cancer of the tongue opinion is divided between surgery and irradiation.

Judging from the recent literature and attempting to strike an average, it appears that surgery produces five-year cures in about 25 per cent of cases, while x-ray and radium produce about 30 per cent. In comparing these two methods of treatment it is only fair to consider: (a) operative mortality, (b) recent and rapid improvement in radio-therapy and (c) that many cases, considered inoperable, have been turned over to the radiotherapist for irradiation and constitute a statistical liability for this type of treatment. The extent to which surgical neck dissection should be employed is subject to considerable controversy.

While we cannot all be experts in such highly specialized subjects as cancer treatment, there is a considerable advantage to being able to appreciate the general problem involved. The following facts about mouth cancer should be emphasized:

1. The present mortality caused by cancer of the mouth is altogether too high.
2. Because of its accessibility, cancer of the mouth should be detected earlier than it is at present.
3. A greater appreciation of the incidence and development of mouth cancer would lead to the routine correction of carcinogenic conditions in the mouth.
4. Greater alertness and promptness on the part of the medical profession in making positive diagnoses would lead to earlier treatment and a higher percentage of cures.

He Took No Chances

The doctor examined him twice a year. He wore his rubbers when it rained. He slept with the windows open. He stuck to a diet with plenty of fresh vegetables. He relinquished his tonsils and traded several worn-out glands. He played golf—but never more than eighteen holes at a time. He got at least eight hours' sleep. He never smoked, drank or lost his temper. He did his daily dozen. He was all set to live to be a hundred. The funeral will be next Wednesday. He had forgotten about trains at grade crossings.—*Genoa Tribune*.

DEPARTMENT OF SOCIETY ACTIVITY

C. T. EKLUND, M.D., Secretary

UNIVERSITY OF MICHIGAN THE DEPARTMENT OF POSTGRADUATE MEDICINE

and the

MICHIGAN STATE MEDICAL SOCIETY

announce

Intensive Postgraduate Courses

Detroit

PediatricsApril 20, 21 and 22
ProctologyApril 27, 28 and 29
Genito-urinary DiseasesApril 30-May 2
Gynecology, Obstetrics and Gynecological Pathology....May 18-23
General MedicineMay 25-30

Ann Arbor

Electrocardiographic DiagnosisApril 6-11
Diseases of Metabolism.....March 30-April 3
Medical Military Course.....April 12-25
Ophthalmology and Otolaryngology.....April 27-May 2
RoentgenologyJune 29-August 7
Laboratory TechniqueJune 29-August 7

For further information, address:

Department of Postgraduate Medicine
University Hospital
Ann Arbor, Michigan

ANNUAL SECRETARIES' CONFERENCE

THE Secretaries' Conference was held too late to be reported in the February JOURNAL and it is perhaps just as well, since in the month that has elapsed the enthusiasm which may have been derived from that meeting may need restimulation. As far as your Secretary is able to determine, the conference may accurately be described as highly satisfactory. If the secretary of your county society was not there and had no very good excuse for his absence, he missed an opportunity to learn how to serve the best interests of your county organization.

Dr. R. L. Sensenich, President of the Indiana State Medical Association, made an inspiring address in which he likened the

secretaries of the component county societies to field representatives of a corporation and pointed out that if organized medicine were a private corporation any such field representative who did not get results, or who did not work at his job, wouldn't last very long. Your state society now has two methods of maintaining contact with all the component county societies: first, through the county secretaries, and, second, through the county Public Relations Committees. If results are not obtained with the one, recourse may be necessary to the other in YOUR county society. As has been pointed out so ably by our President, Dr. Penberthy, in his discussion of the five year program of the Michigan State Medical Society, it is absolutely essential that the officers, and

particularly the secretary of each component county society, shall be one who is willing to work, who is on top of his job and keeps moving.

Highlights of the day's program were:

1. The generous hospitality and fine spirit of members of the Ingham County Medical Society, who were our hosts at the Lansing Club between the afternoon session and dinner. We are particularly indebted to Drs. Earl I. Carr, Robert Breakey, Harold Wiley, Howard Willson, Milton Shaw, L. G. Christian, Russel Finch and others, for the magnificent way in which they rose to the occasion.

2. The discussion of the five-year program of the state society by our able President, Dr. Penberthy. You are especially referred to the President's letters which appear monthly in the JOURNAL and urged to carefully read every one.

3. The description of the integration program of the Public Relations Committee by Dr. L. Fernald Foster, who, incidentally, is the new Chairman of the Secretaries' Conference, and is therefore given a double edged sword and can effect a liaison between state and component county societies either through contact with the secretaries or through his own organization of Public Relations Committees.

4. Dr. Howard H. Cummings described the efforts of the State Society to guarantee to the people of Michigan a high grade of medical care, first, through the enactment of appropriate legislation, and, second, through the increased scope of Post Graduate activities. Dr. Cummings is the Chairman of the Legislative Committee of the state society and has also been recently appointed Assistant Director of Post Graduate Medical Education at the University.

5. Right after luncheon Dr. C. C. Slemmons discussed in detail the application of the Social Security Act to Michigan. He pointed out the several devices through which funds are to be allocated to the several states. More will be heard about this program in the near future, but the greater portion of the funds which are expected to become available for use in Michigan will be used in establishing new county and district full time public health units. Other portions are to be allotted to already existing health units to increase their efficiency, and to the training of public health personnel.

6. During the afternoon a round table discussion was led off by Dr. Henry Cook, who outlined the activities of the Council and its Executive Committee and the several standing and special committees and really described by "the busyness" of your state society. In the round table discussion which followed the problem of home and office care under SERA and the problem of hospitalization of afflicted adults was thoroughly discussed. Dr. Stanley Insley presented facts and figures pertinent to the first topic and pointed out that medical care under SERA would hereafter not be a particularly pertinent matter for discussion, since its principles and details of operation had already been firmly established in most areas, and minor details only remained to be adjusted in individual county administrations. Valuable discussion was added by Drs. Florence Ames, Ernest Bauer, Fred Miner, Ralph Pino, Roy C. Perkins, Wilfred Haughey, and many others.

For the record, those in attendance were:

Officers—President, Grover C. Penberthy, M.D.; Secretary, C. T. Ekelund, M.D.

Councilors—A. S. Brunk, M.D., Henry Cook, M.D., H. H. Cummings, M.D., T. F. Heavenrich, M.D., P. R. Urmston, M.D.

Bay—L. Fernald Foster, M.D., Secretary; M. C. Miller, M.D., President; Roy C. Perkins, M.D., Chairman Public Relations Committee.

Calhoun—Wilfrid Haughey, M.D., Secretary; R. C. Winslow, M.D., President; Robert H. Fraser, M.D., Chairman Public Relations; A. T. Hafford, M.D., Delegate.

Chippewa—Stanley H. Vegors, M.D., Secretary.

Clinton—T. Y. Ho, M.D., Secretary-Treasurer; Dean W. Hart, M.D., President; Arthur O. Hart, M.D.

Eaton—Thomas Wilensky, M.D., Secretary.

Genesee—R. D. Scott, M.D., President; F. B. Miner, M.D., Public Relations Committee; C. P. Clark, M.D., Director.

G. I. C.—Bernard J. Graham, M.D., Secretary; Alfred L. Aldrich, M.D., President; B. C. Hall, M.D.

Hillsdale—Edward G. McGavran, M.D., Secretary; H. Frazier Mattson, M.D.

Ionia-Montcalm—John J. McCann, M.D., Secretary.

Ingham—Russell L. Finch, M.D., Secretary; Earl I. Carr, M.D., President; Robert S. Breakey, M.D., A. M. Campbell, M.D.; L. G. Christian, M.D., Delegate; C. S. Davenport, M.D.; C. F. DeVries, M.D.; C. R. Doyle, M.D.; Fred J. Drolett, M.D.; C. B. Gardner, M.D., Fred M. Huntley, M.D., Harold A. Miller, M.D., Subcommittee on Economics; Milton Shaw, M.D., President-elect; C. C. Slemmons, M.D., State Health Commissioner; L. M. Snyder, M.D., Chairman Public Relations Committee; L. C. Towne, M.D., H. W. Wiley, M.D., Howard S. Wilson, M.D.

Jackson—Horace Wray Porter, M.D., Secretary; Charles R. Dengler, M.D., President; J. E. Ludwick, M.D., Chairman Public Relations Committee.

Kalamazoo—F. T. Andrews, M.D., Delegate; Sherman E. Andrews, M.D., Public Relations Committee; Ralph G. Cook, M.D., Public Relations Committee; A. E. Henwood, M.D.

Kent—John M. Whalen, M.D., Secretary-Treasurer.

Lenawee—O. Whitney, M.D., Secretary (Sub.)

Livingston—H. L. Sigler, M.D., Secretary; Harold C. Hill, M.D.

Monroe—Florence Ames, M.D., Secretary; T. A. McDonald, M.D., President; Albert H. Reisig, M.D.

Muskegon—Leland E. Holly, M.D., Secretary; Edw. O. Foss, M.D., Public Relations Committee; A. F. Harrington, M.D., Chairman Public Relations Committee; Roy Herbert Holmes, M.D., Public Relations Committee; Wm. M. LeFevre, M.D., Public Relations Committee; C. B. Mandeville, M.D., P. R. C. Secretary.

Oakland—Chauncey Greeley Burke, M.D., Secretary; Ernest W. Bauer, M.D., Economics Committee. *OMCORO*—G. L. McKillop, M.D., President.

Ontario—K. N. Wells, M.D., Secretary-Treasurer. *Saginaw*—William K. Anderson, M.D., Secretary-Treasurer; Clarence Toshach, M.D., President.

Saint Clair—G. M. Kest, M.D., Secretary; Jacob H. Burley, M.D., President.

Shiawassee—W. E. Ward, M.D., Secretary; Geo. L. G. Cramer, M.D., President; R. J. Brown, M.D.

Washtenaw—John V. Fopeano, M.D., Secretary-Treasurer; J. S. DeTar, M.D., Chairman of Public Relations Committee.

Wayne—Martin H. Hoffmann, M.D., Secretary; F. B. Burke, M.D., Chairman of Ethics Committee; T. K. Gruber, M.D., President-elect; Stanley W. Insley, M.D., Chairman Committee on Medical Relief; Henry A. Luce, M.D., Trustee Wayne County Medical Society; Paul E. McQuiggan, M.D., Wayne County Afflicted Adult Coordinator; Ralph H. Pino, M.D., Chairman Economics Committee; A. H. Whittaker, M.D., Public Relations Committee; Mr. Harry R. Lipson, Assistant to Executive Secretary; Mr. J. A. Bechtel, Acting Executive Secretary.

Wexford—Benton A. Holm, M.D., Secretary; John F. Gruber, M.D., President; L. E. Showalter, M.D.

SECRETARIES' CONFERENCE ROUND TABLE

AT the annual Secretaries' Conference in January a special Round Table discussion was held on two important questions:

1. The home and office care of indigents under the Emergency Relief Administration.

2. The care of hospitalized adults who for economic reasons need county help.

The five papers which served as the basis for the discussion of the afternoon are reproduced herewith, with the intent that they will make available to every county society a record of the best experience and accomplishment in divers areas toward the solution of these two perplexing problems. It is hoped that the officers and appropriate committees of every county society will find stimulation and inspiration from these recorded experiences, and "go and do likewise."

E. R. A. Medical Care in Monroe County

The present set-up for medical services to relief clients in Monroe County was in good working order by May 1, 1935. Some phases of the work are pat-

terned after the plan of Oakland County and others arranged to meet local needs.

The Relief Commission provides only for work done in the doctor's office or the patient's home.

In our plan, the patient calls the doctor. He has free choice of physicians. Of course, it is understood that he call some one within a reasonable distance, so that mileage fees are not unnecessarily large.

The welfare client may call a physician for himself or a member of his family whenever he finds one necessary. Neither the client nor the doctor needs previous authorization.

After performing the service, the doctor mails to the Welfare office on a card furnished by the Welfare his bill for the service. On this card is given the name of patient, nature of service, that is, office, home, night call, diagnosis, classification of illness, charge for service, for mileage, for medicine. Most of these points are covered by merely checking lists on the card, so that the cards can be filled out very quickly.

Doctors are requested to send in cards as soon as possible. A separate card must be made out for each service.

Quality of care is determined by need. Our contracts with the welfare commission state "Welfare patients deserve necessary medical care, but no more." Our doctors have usually found ample the fifty cents allowed for medicine per service. Where unusually expensive treatment is indicated, a request and explanation are made to the relief administrator. It is allowed if considered justified by the medical society advisory committee.

As to quantity of work, in acute cases, the doctor goes ahead on his own discretion and does what he considers necessary. In chronic cases, calls are limited to one weekly unless especial need is explained to the administrator and allowed by him on advice of the medical society committee.

Consultations are allowed only on special authorization by the relief administrator, who acts on advice of the medical society committee. Our experience with our particular administrator is that he is very agreeable to allowing any NECESSARY work.

Fees are probably those which are allowed throughout Michigan. If in complicated cases the fee allowed is inadequate, the case is to be reported in detail and the fee is adjusted accordingly.

A committee of three doctors appointed by the president of the county medical society acts in an advisory capacity to the relief commission. It meets with the relief administrator regularly once a month. At this time, the doctors' bills are reviewed. Generally service has been according to contract and bills are passed without comment. Occasionally, a doctor or a relief client must be reminded of the limitations of the contract.

In the last eight months of 1935, doctors of Monroe County have received \$4,178.18 for a total of 2,592 medical services: \$3,369.39 of this was for calls; \$599.41 for medicine; \$209.38 for mileage.

Altogether the Monroe County plan has been found practicable to all concerned. Doctors are satisfied; patients are satisfied; welfare is satisfied. Of course, much of this all-around satisfaction is due to our good fortune in having as our relief administrator, Mr. Russell H. Clark. He has worked out the details of the scheme efficiently. He has never presumed to decide medical problems, but has always consulted one or more members of the advisory committee of the county medical society or the committee as a whole when a medical matter was to be decided. Monroe County Society heartily

approves of this plan for providing medical service for relief clients.

FLORENCE AMES, M.D., *Secretary.*

SERA Medical Care in Oakland County

I would like to read a short report to you, which I am sure will be more emphatic than any words of mine. During the year 1934, 131 physicians in Oakland county received a total of \$87,038.24, or an average of \$664.41, from the SERA. The highest paid were three doctors who received more than \$3,000.00, the lowest, fifty-two who received up to \$250.00.

Now, gentlemen, that money came for services rendered to the indigent of Oakland County by regular physicians, prompt and adequate service, I may add, and was quite as promptly paid for, as the relief administration, through simplification of book-keeping methods, were usually able to send us our checks within no more than sixty days of the time service was rendered.

By these statements, you will be able correctly to surmise that Oakland County physicians are entirely satisfied with the method of administering relief medicine. This feeling of satisfaction is in great measure due to the fact that we have a physician as medical administrator, Dr. Ray G. Tuck, who, from the very inception of our plan, has been far- visioned and sympathetic with the problem. His first principle was free choice of physician by the patient, just as in private practice. This has been scrupulously carried out, with only a few disciplinary exceptions. Second, he was insistent that his duty was simply to administer the act, the physicians to supply the medical service. Third, he stressed the importance of paying the physician as promptly as possible, and to this end he has worked, with the result that records are simple and few in number. Fees for extraordinary services are arrived at by consulting the fee schedule as a guide and using common sense as the final word. In only a few instances have there arisen differences about fees, and they were in all cases settled by the advisory board.

Perhaps as important as any factor in the success of this work in Oakland County was the fact that Dr. Tuck has played the game with the profession. His advisory committees were not merely rubber stamps, but met with him frequently, especially as the set-up was getting under way, and frankly and fully discussing all matters of policy, asking for advice, and, more important, acting on that advice when the committee felt they were speaking fully for the profession.

These points have been stressed simply in order that the following fairly obvious conclusions may be drawn:

Free choice of physicians is a simple and absolutely necessary part of any plan.

Relief administration of medical matters should be in the hands of physicians or medically trained personnel. A training school for such personnel would admirably fill the need.

Uniformity of such administration throughout the state, with such local changes as might be necessary, would do much to maintain for the profession its respect before the world, at the same time providing a basis for such changes in social laws as seem to keep pace with changing times, without losing control of the practice of medicine.

Finally, our experience has shown us that medical relief, as here administered, relieves the civilian administrator of many of his most vexing problems, so that, assured of adequate medical care for his clients, he can turn his energies to other matters, of which he has fuller knowledge.

ERNEST BAUER, M.D.

Hospitalization of Indigents in Bay County

The present plan for the hospitalization and treatment of indigent and poor persons in Bay County was consummated after three or more years of effort on the part of a medical group from the Bay County Medical Society to secure and maintain the proper relationship as between physician and patient and patient and hospital, at least so far as the handling of county patients was concerned.

This continued effort on the part of the Medical group, coupled with the rising cost of hospital care to the county, resulted finally in the appointment by the County Board of Supervisors of a Hospital Committee to investigate the hospitalization of indigents of the county. This committee of the Board of Supervisors together with a committee of physicians representing each of the hospitals and other groups, formulated a plan which was acceptable to all concerned and, having been adopted by the Board of Supervisors in June, 1934, has been in operation since July 1, 1934. The plan has been operated quite successfully, has saved the County considerable money, nearly \$12,000 in one year, and has since become known throughout the State as the Bay County Plan.

The plan provides for an economic filter composed of members of the Bay County Poor Commission, who investigate all cases, as to their indigency or financial status.

An advisory Medical Board of five members acts as a medical filter. The members of this board, each of whom represents a hospital or group, are appointed by the Poor Commission and are approved by the County Medical Society. This Medical Board meets once weekly at the Medical Center in the County building to examine patients recommended for hospitalization or surgery. The Medical Board also reviews Emergency or other cases hospitalized of necessity in the interim between meetings, and conferences are also held with the Poor Commission and the Judge of Probate. A fee of \$5.00 is paid each member of the Medical Board out of the Poor Funds, for each regular weekly meeting.

In the set-up of the plan, the indigent patient consults his physician, who completes in duplicate a short blank form furnished by the Poor Commission, stating his findings and recommended treatment. These blanks are referred to the Poor Commission acting as economic filter. If treatment is approved, the patient presents himself at the weekly meeting of the Medical Board for examination. On examination the Medical Board determines whether or not the proposed treatment is emergent or necessary and also whether or not the patient will be benefited by the treatment outlined by the attending physician. After examination of the patient, approval or disapproval of requested treatment is noted on the back of the blank and is signed by the members of the Medical Board. Record is kept by the County nurse and the patient's blank mailed to the attending physician or given to the patient in a sealed envelope for delivery to the physician.

If the patient is hospitalized the bills for hospital and doctor are paid out of County funds. Patients recommended for examination or treatment at the University Hospital follow the same course. The Medical Board recommends the period of proposed hospitalization and all requests for an extension of time must come before the Board for approval.

Patients too ill to appear before the Medical Board are usually visited by a member of the Medical Board with the attending physician.

Emergency cases must be reported, by the attending physician, within twenty-four hours for investigation, and one or more members of the Medical Board consulted by phone. Blank forms are completed as in other cases.

Special treatments, x-ray, radium, and special

laboratory work must be approved by the Board. Tissues removed at operation are examined by a registered pathologist and reported to the Medical Board.

A special fee schedule for county work is in force which is approximately 50 per cent of the regular fee schedule of the Bay County Medical Society. The hospital day rate is set at \$3.50, which includes all ordinary laboratory work, ordinary nursing, medicines and dressings. More expensive medicines and appliances are furnished at cost. Special nursing must be approved by the Board.

Under this plan free clinics were abolished and the services of five county physicians were dispensed with, the work being done by the local physicians.

The members of the Advisory Medical Board also act in an advisory capacity to the Emergency Relief Administration and constitute the Public Relations Committee of the Bay County Medical Society.

ROY C. PERKINS, M.D., *Chairman,*
Medical Advisory Board.

Ingham County Plan for Hospitalization of Indigents

1. Classification and number of hospital indigent cases treated last year (January 1, 1935-January 1, 1936)
 - a. From City of Lansing

Adults	671
Children	301
 - b. From County of Ingham

Adults	232
Children	223
 - c. From out of County

Adults	82
Children	44
 - d. Miscellaneous — Transients, Soldiers, and Sailors, Charity Cases

Adults	59
Children	13
 - e. Sub-total

Adults	1,044
Children	584
 - f. Total—1,628 indigents.
2. Number of Hospital Days

Adults	12,253
Children	6,466
3. Medical service rendered if paid on Afflicted and Crippled Children's fee schedule

Adults	\$31,888.50
Children	18,568.00
4. Approximate amount paid to hospitals by city, county, out of county and Welfare at \$4.50 a day

Adults	\$55,138.50
Children	29,097.00
Total	\$84,235.50
5. Amount paid to Medical Society of Ingham County by City of Lansing for care of all cases in hospitals—\$20,000.00 in monthly payments.
6. Amount paid by County of Ingham—\$3,600.00 in monthly payments.
7. Physicians caring for out of county cases collect individual amount from out of county treasurers or supervisors. No figures on these amounts are available and no portion of this is included in these figures.
8. No remuneration for medical service rendered transients, soldiers and sailors or their families.
9. Average stay in hospitals—11.5 days per case.
10. Investigation of economic status of cases treated.
 - a. County Commissioner of Poor and County Agent—Good.
 - b. City Welfare Director and Investigator—Excellent.
 - c. Members of Board of Supervisors—Questionable. (It is reported that sympathy, political

help and misunderstanding as to those in need of emergency treatment is the occasional practice.)

- d. City and Assistant City Physician—Excellent for medical need. (Economic condition questionable. Not investigated personally by physicians but checked by City Welfare Director.)
11. Assignment of cases in hospitals to staff members who are members of the County Society.
 - a. Rotating. (Surgical, medical, obstetrical and gynecological, eye, ear, nose and throat, pediatrics and genito-urinary.)
 - b. Every member has case assignments.
 - c. Internes work under supervision of staff members.
 - d. Patient-physician contact possible if patient is under physician's care and physician desires to keep the case, otherwise referred to staff man.
 - e. Patient does not have a choice of physician except as stated above.
12. Medical Director.
 - a. Member of the County Society.
 - b. Elected by Society for one year.
 - c. Duties.
 - (1) Supervision of all welfare cases.
 - (2) Assignment of cases.
 - (3) Detail report of each case: Age, name, address, referred by, assigned to, diagnosis, laboratory reports, x-ray findings, pathological reports, treatment, length of stay in hospital, consultations, anesthetics and anesthetists, medical service charge, hospital charges.
 - (4) Individual report of work done by doctors.
 - (5) Summary report of all work for month.
 - (6) Constant contact with all political agencies.
 - (7) Salary paid by society.
13. Advantages of City and County Agreement:
 - a. 100 per cent efficient medical organization and unity.
 - b. Monthly postgraduate work for each member.
 - c. Monthly dinner paid by Society.
 - d. Average 85 per cent attendance to monthly meetings.
 - e. Each member is benefited, hence the patient and the good practice of medicine is helped.
 - f. State Medical Society dues paid by Society.
 - g. A.M.A. and Journal paid by Society.
 - h. Protective Insurance paid by Society.
 - i. All social entertainments paid by Society.
 - (1) Dinner dances.
 - (2) Beef steak roasts.
 - (3) Christmas party for children.
 - (4) Golf tournament.
 - (5) President's party including the ladies.
 - j. Publicity expenses.
 - (1) Legislation—State aid.
 - (2) Newspaper.
 - (3) Radio.
 - k. Memorial Fund.
 - (1) One-third of income to this fund.
 - l. All expenses and activities of Society paid by Society except for the purchase of liquor.
14. Disadvantages of having money in the treasury:
 - a. Eagerness of some men to spend.
 - b. Desire to pro-rate according to work done, causing dissension, petty jealousy, discord, and unhealthy feeling among some members and loss of unity.
 - c. Difficulty to establish a definite program with a possible changing income.
15. Amount in treasury above expenses—Over \$20,000.00.

DEPARTMENT OF SOCIETY ACTIVITY

16. Suggestions for spending Society money:
 - a. Club house.
 - b. Life insurance.
 - c. Gasoline station.
 - d. Insurance agency (to handle all doctors' policies: health, auto, house and taxes).
 - e. Earnings from investment of Memorial Fund
 - (1) Doctors' old age pension.
 - (2) Scholarships for doctors' children (loans without interest).
17. Conclusion.
 - a. 100 per cent medical organization.
 - b. Each member enters politics and becomes acquainted with candidates.
 - c. Medical Director, a physician, should direct and supervise welfare and economic activities.
 - d. Every member of the Medical Society *becomes a better doctor.*

HAROLD A. MILLER, M.D., *Medical Director,*
Medical Society of Ingham County.

Battle Creek Academy of Medicine and Dentistry, Inc.

The Battle Creek Academy of Medicine and Dentistry, Incorporated, organized January 1, 1933, constitutes the business organization of the profession in Calhoun County, although originally it was organized to contract with the city and adjacent most populous townships. On January 1, 1934, with the advent of FERA it was expanded to include the entire county. Two committees conduct most of the affairs of the Academy:

a. Investigating Committee, which worked in cooperation with the County Emergency Relief Administration, and which now also has become the Medical Filter Committee of the Calhoun County Medical Society.

b. The Auditing Committee, which meets twice a month and audits all bills before they are presented to the responsible unit of government. (Calhoun County, like most of the counties in the state, is on the unit plan. Each city or township is responsible for the care of its own indigents requiring hospitalization.)

Before the advent of ERA the Battle Creek Academy of Medicine and Dentistry, Inc., was in operation for one year, during which time the Academy had a contract with the City of Battle Creek and adjacent townships. During this period a lump sum of \$12,000.00 was paid to the Academy and services totalling \$49,782.25 were rendered. The Academy had expenses amounting to \$3,040.16 for the salary of investigator and office maintenance. The balance of \$8,959.84 was pro rated among the physicians according to the services rendered and amounted to 17.9 cents on the dollar of the bills rendered at normal average fees. By comparison the figures for 1934 and 1935 are submitted. The population of the county is about 65,000, of which 45,000 reside in the City of Battle Creek. Complete medical and dental care in home and office (under ERA) during 1935 cost \$56,576.02 as against \$70,180.91 for 1934. There was also paid to physicians, through the Academy a total of \$14,792.00 for hospitalized cases in 1935, for services which at regular rates amounted to \$29,982.00. In addition to the above mentioned figure for home and office practice there was an allocation of \$5,554.25 paid for the care of chronic cases during eleven months. The combined figures brought the doctor 45.2 cents on the dollar for home and office care as against 49.3 cents on the dollar for hospitalized care, figured on the basis of normal average fees.

The Academy maintains its own investigator, who reports back to the Committee. In case of doubt the Committee investigates for itself or consults

with the doctor referring the case, and its decision is final. Beginning July 1, 1935, the Investigating Committee became, in point of fact, a Filter Committee, when the City of Battle Creek was obliged to reduce its allotment because of the fifteen mill limitation. Every case was reviewed by an appropriate member of the Committee to limit commitments in accordance with the determination of medical necessity.

"We find the Academy plan very satisfactory and automatically the County Medical Society refers all economic questions there. We have on occasion had to resort to politics, especially when we replaced two very unfavorable Commissioners in our City government."

WILFRED HAUGHEY, M.D., *Secretary,*
Calhoun County Medical Society.

THE COUNCIL CHAIRMAN'S COMMUNICATION

A PERIODIC inventory is a valuable procedure. Each year all businesses and most organizations make a financial recapitulation of their activities. Firms dealing in tangibles have monthly inventories of stock on hand. Even intangibles, such as "good will," are listed annually in the books of our business friends.

A county medical society has certain intangible assets which generally are more valuable than its physical properties. "Esprit de corps" is part of the estate of an active medical society which is more precious than gilt-edged stocks and bonds.

To make an inventory of its intangible assets, the county medical society must turn to you and ask: "As a physician, what have you contributed to the practice of medicine? What have you contributed to the community? What constructive work have you done in the interests of your medical society?" The sum total of the answers will represent your county medical society's intangible possessions, or, more properly, *your* possessions, because, after all, the county medical society is YOU. Your inventory will show just how good you are making these particular assets of yours.

Take your inventory today.

HENRY COOK, M.D.

SCIENTIFIC EXHIBIT

SECTION officers are already busy planning for the next annual meeting to be held in Detroit in September. Especial emphasis is being given to the scientific exhibit. It is to be hoped that the finest and most instructive scientific exhibit ever put on by the Michigan State Medical Society will be on display in Detroit. If you have, or are

6. *Afflicted Persons' Laws.* Dr. Gariepy reported on activity of the Wayne County Medical Society's Policy Committee re Afflicted Persons' Laws and necessity for their recodification. General discussion, during which Dr. Cook spoke of the Attorney General's opinion to the Probate Judge of St. Joseph, Mich., re the filter system. The Chair appointed Drs. Penberthy and Gariepy to work with the Wayne County Medical Society's Committee of four in further work on this matter. Committee: Drs. Penberthy and Gariepy, plus Wayne County Society Committee.

7. *Committee on Relief Medicine.* Dr. Insley gave data on the survey of his Committee and reported that the full information would be obtained within the next two or three weeks and be ready for publication in April.

8. *Change in Afflicted Child Law.* Dr. Cummings presented a letter from Dr. J. G. Blaine of Sault Ste. Marie suggesting a change in the Afflicted Child Act. This was referred to the Executive Secretary for investigation and reply.

9. *Adjournment.* The Chair requested all members to send him ideas for discussion at the next meeting of this Committee. He thanked all for their attendance and good advice. The meeting was adjourned at 10:00 P. M.

MINUTES OF THE MEETING OF THE PUBLIC RELATIONS COMMITTEE

Lansing, February 16, 1936

1. *Roll Call.* The meeting was called to order by Dr. L. F. Foster, Chairman, at 1:00 P. M., in the Hotel Olds, Lansing, Michigan. Present were Drs. L. F. Foster of Bay City, F. T. Andrews of Kalamazoo, E. I. Carr of Lansing, R. H. Holmes of Muskegon, F. B. Miner of Flint, and A. V. Wenger of Grand Rapids. Also present Dr. Grover C. Penberthy, President, Detroit; Dr. Henry Cook, Council Chairman, Flint; Dr. J. T. Burns, Dr. R. G. Cook, Dr. F. M. Doyle, and Dr. L. W. Gerstner, all of Kalamazoo; and Dr. L. O. Shauntz of Flint; and Executive Secretary Wm. J. Burns. Absent Drs. Philip Riley of Jackson, J. J. Walch of Escanaba, and A. H. Whittaker of Detroit.

2. *Minutes.* The minutes of the meeting of December 22, 1935, were read and approved.

3(a). *Afflicted-Crippled Child Laws—Filter System.* The map of Michigan showing the integration of the filter system was shown. Discussion brought out information from Dr. Holmes that Ionia-Montcalm has no economic filter; no hospitals approved for afflicted child work, and all cases are going either to Grand Rapids or Ann Arbor. Motion of Drs. Andrews-Wenger that Dr. Holmes contact the county medical society in that district recommending that it give approval to the hospitals for medical care of afflicted children and that the hospitals seek final approval from the Crippled Children Commission. Carried unanimously.

Report of appearances of PRC members.

- I. Dr. Miner reported sending out a questionnaire to six of his eight counties. He gave a detailed report in writing concerning the progress of his District with the filter system. This included advice that Eaton County has arranged a rotating filter for the whole year. Dr. Miner stated that in the City of Flint the filter system had eliminated more than 50 per cent of the cases.
- II. Dr. Holmes reported that all counties in his District were integrated except Ionia-Montcalm.
- III. Dr. Wenger reported on his District, and on his correspondence with the various county medical societies.

IV. Dr. Carr reported that his District was progressing in fine shape.

V. Dr. Andrews reported on his visits to county medical societies and their progress with the filter system.

VI. Dr. Foster's report showed that he had covered 46 counties in the State explaining the filter system to county medical societies. Dr. Cook suggested that this Committee ask the public relations committees in county medical societies which are not fully integrated what is holding up their progress. Dr. Cook approved sending out a map to each Councilor, accompanied by letter, showing the integration of the filter system in each Councilor District.

3(b) *Scope of PRC Members' Authority.* Dr. Miner propounded a question re proper contact of PRC members with county medical society officers and public relations committee members. The Committee felt that each member of the State Society's PRC had full authority to help organize the county medical societies in his District.

3(c). *County Medical Society's Secretary an ex-officio Member of Local PRC.* Dr. Foster explained the advantages of such a system, which was followed by full discussion. Motion of Drs. Andrews-Holmes: because of the increased activities of the MSMS, more and more work is being delegated to the public relations committees in the various county medical societies: in order to facilitate and expedite action, it is necessary that close contact be established between the secretary and the public relations committee of every county medical society and this might be accomplished by making the secretary an ex-officio member of the public relations committee of a county medical society. Motion carried unanimously. A letter embodying this motion is to be sent out by the PRC of the State Society, signed by Chairman Foster.

4. *Schedules A, B, C, and D.* The Executive Secretary reported on the action of the Crippled Children Commission, January 16, 1936, reviving these fee schedules as of July 1, 1936.

Motion of Drs. Miner-Andrews that physicians be urged to send in their bills for medical work rendered crippled and afflicted children from January 1, 1936, based on Schedules A, B, C, and D, in order to aid in arriving at the costs of administering these acts, this recommendation to be forwarded to all county medical societies. Carried unanimously.

Dr. Cook of Kalamazoo asked information relative to hiring special nurse for afflicted child case. This type of special service is not allowed by the Crippled Children Commission, it being considered that the \$4 per day rate to hospitals includes this cost.

5(a). *Coöperation of Probate Judges with Filter System.* Dr. Foster reported that the Bay County Medical Society is inviting seventeen probate judges of the northeastern part of the state to a social meeting on February 28 at which Judge Frank L. McAvinchey will speak. Motion of Drs. Andrews-Carr that this Committee recommend that one or more councilor districts invite the judges of the area to a medical society meeting, and that this recommendation be included in the PRC letter to be sent to county medical societies. Carried unanimously. Dr. Miner spoke of the Regional Meeting of the Michigan Conference of Social Work in Flint on February 14-15, 1936, at which Professor Arthur Dunham, Institute of the Health and Social Sciences, University of Michigan, Detroit, spoke on "Needed Social Legislation in Michigan"; he suggested a joint meeting of the MSMS, the Probate Judges Association, and the Michigan Conference of Social Work for a discussion of recodification of the wel-

fare laws. Motion of Drs. Miner-Andrews that the Executive Secretary contact John A. MacLellan, Executive Secretary of the Michigan Conference of Social Work, and request copies of Professor Dunham's talk for distribution to the chairmen of the MSMS committees, and to members of the PRC, and other officers interested. Carried unanimously.

Letter to Probate Judges. Dr. Foster explained that Judge McAvinchey had sent a letter to all probate judges on February 3 urging that they cooperate with the filter system.

Letters of Approval from Probate Judges. Dr. Cook suggested that copies of letters from judges satisfied with the filter system be obtained and sent to each member of the PRC to aid in the work of integrating the program throughout the State; also that a copy of Judge McAvinchey's talk in Bay City on February 28 be obtained and sent to each member of the PRC. Motion of Drs. Miner-Holmes that this Committee send out a questionnaire, arranged by Dr. Foster, to all probate judges and to the public relations committees of the county medical societies, inquiring about the filter system and its weak spots. Carried unanimously.

5(b). *Attorney General's Opinion re Filter System.* This opinion to Judge Malcolm Hatfield of St. Joseph, Michigan, was read in part. The Committee suggested that an excerpt of same be printed in the JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY.

5(c) *Cut Rates Offered by Hospitals.* A letter from the CCC relative to cut rates for obstetrical work to afflicted children offered by four Wayne County hospitals, was read. Discussion. Motion of Drs. Holmes-Miner that this problem be referred to the Michigan Hospital Association, with a copy to the Wayne County Medical Society. Carried unanimously.

6. *Publicity.* The Executive Secretary presented recent newspaper publicity re the afflicted child, lack of appropriation, and fees to physicians: *Detroit Times* of January 26; *Detroit News* of January 29; *Detroit Times* of February 2; and editorial in *Detroit Times* of February 5.

7(a). *Literature Against Socialization of Medicine.* The Executive Secretary reported that The Council had approved the sending out of literature, prepared by the A. M. A., against the socialization of medicine to each of the 991 schools in Michigan. Motion of Drs. Carr-Andrews that this Committee recommends that literature be sent also to the 246 public libraries of Michigan, to the Extension Division of the U. of M., and also to those on the lists of the Joint Committee on Public Health Education, and to others who may be interested. Carried unanimously.

7(b). *Booklet or Catechism on Socialization of Medicine.* The Committee discussed the sending of information re the socialization of medicine to the physicians of Michigan and others who may be interested. It was felt that a brief, concise pamphlet should first be sent to the profession, to whet their interest for the subject and prepare the way for their study of a more detailed and complete brochure to be mailed at a later date. Motion of Drs. Carr-Andrews that this Committee respectfully request the Executive Committee of The Council that a small Brief be authorized and printed and sent to the profession, with sufficient additional copies for general distribution. Carried unanimously.

7(c) *Speakers' Bureau.* Dr. Foster explained an incident showing the necessity for a Speakers' Bureau of the MSMS. General discussion was followed by a motion by Drs. Holmes-Andrews that this Committee respectfully recommend to the Executive Committee of The Council that it set up a

panel of speakers to discuss the social aspects of sickness, to be available when called upon in this State. Carried unanimously.

8. *County Health Units.* This subject was fully discussed by the Committee, followed by a motion by Drs. Holmes-Miner that in the PRC letter to the county medical societies the Public Relations Committee invites the attention of each and every county medical society to the action to the House of Delegates of the MSMS re county health units, to be followed by a quotation from the minutes of the House of Delegates. Carried unanimously. Motion of Drs. Carr-Miner that this Committee respectfully request an immediate statement from the Preventive Medicine Committee relative to their recommendations for the establishment and maintenance of a county health unit. Carried unanimously.

9. *Thanks and adjournment.* Motion of Drs. Miner-Holmes that the Committee thank the officers of the MSMS and guests present for their attendance at this meeting. Carried unanimously. The Chair expressed appreciation to the members also for braving the blizzard and zero weather to attend this session, and adjourned the meeting at 5:15 P. M.

COUNTY SOCIETIES

BAY COUNTY

A regular meeting was held Wednesday evening, January 15, with forty-five present.

After the transaction of routine business, Dr. R. A. C. Wollenberg, Detroit, gave a scholarly discourse on "Leprosy." The talk was illustrated with a number of lantern slides.

The society decided against doing group physical examinations for the Y.M.C.A., Y.W.C.A. and similar organizations at cut rates. They directed these organizations to send such applicants to their personal private physician for any physical examination.

At a regular meeting held Wednesday, January 29, fifty-two were present at the Wenonah Hotel.

The meeting was addressed by President Grover C. Penberthy. He sketched the activities of the State Society and gave an educational discourse on the "Compensation Law, Its Operations and Compensation Fees."

The society referred to its Public Relations Committee, a revision of its Compensation Fee Schedule and schedule for life insurance examinations.

There were fifty present at the Elks Club at a regular meeting, Wednesday, February 12. Councillor Urmston reported on the annual meeting of the Council. Secretary Foster reported on the annual conference of County Secretaries, held at Lansing, Sunday, January 26.

Announcement was made of the death of Dr. Byron Ovenshire. Dr. Ovenshire was eighty-seven years old and had not been a member of the society for many years.

Dr. Ralph Perkins, Detroit, gave a very instructive and practical talk on "Venereal Diseases."

The society enjoyed its first Sea Food dinner of the winter season.

On Friday, February 28, the society members were dinner hosts to the Probate Judges of this section of the state. Hon. Frank McAvinchey of Flint was the speaker of the evening.

L. FERNALD FOSTER, M.D.,
Secretary.

JOUR. M.S.M.S.

EATON COUNTY

The Eaton County Medical Society held its first meeting under the leadership of the newly elected president, Dr. H. A. Moyer, Thursday, January 30, 1936, at Charlotte, Mich. After the dinner Dr. Moyer announced his committee appointments, and at once turned the meeting over to the clinical and scientific program.

Dr. Milton M. Rozan of Lansing addressed the society on the subject "General Discussion of Cesarean Sections." In his unusually comprehensive and instructive talk, Dr. Rozan briefly traced the evolution of abdominal delivery from the earliest references to it in Egyptian history to the present day. He particularly dwelt on low cervical section, stressing its very great advantages and lack of disadvantages. A lively discussion took place on the completion of this talk and points of interest stimulating further discussion were raised by Drs. Hargrave, Lawther, Sheets, Sassaman, Moyer and Wilensky.

THOMAS WILENSKY, M.D., *Secretary.*

MECOSTA COUNTY**Report of Committee on Group Immunization**

The Mecosta County Medical Society feels that a uniform policy should be adopted governing the participation of physicians in immunization programs sponsored in the various schools throughout the district from time to time.

The present custom of arranging the work with individual physicians and small groups of physicians separately has brought about misunderstanding and confusion; therefore, in order that all parties concerned may have a definite guide to follow in the matter of arranging immunization programs the following statement of policy may be used as a guide until further notice:

1. A charge of 25 cents per child per treatment will be made in all cases of group immunization. (For this purpose twenty or more shall constitute a group.)

2. The group or school sponsoring the program will be responsible for all arrangements and facilities, financial and otherwise.

3. All children to be treated must be on hand promptly at the appointed time.

4. Where two or more physicians are participating in any given program no choice of physicians will be permitted.

5. This arrangement must not be construed as having any bearing on fees charged by physicians in their private practices.

6. Any child who is unable to receive treatment under this arrangement for financial reasons will be treated free of charge in the office of his or her family physician at his discretion upon application by the parent or guardian.

It is suggested that all arrangements for group immunization be made with the Mecosta County Medical Society.

For smaller groups than the above a \$5.00 minimum fee (plus mileage to be arranged with the participating physician) will be charged.

MECOSTA-OSCEOLA

The officers of the Mecosta-Osceola Medical Society for 1936 are as follows: President, O. J. East, Reed City; first vice president, T. P. Treynor, Big Rapids; second vice president, Leo F. Chess, Reed City; secretary-treasurer, Glenn Grieve, Big Rapids; legal advisor, James B. Campbell, Big Rapids; delegate to State Society, G. H. Yeo, Big Rapids; alternate, Jacob Bruggema, Evart.

GLENN GRIEVE, M.D.,
Secretary-Treasurer.

MUSKEGON COUNTY

The officers of the Muskegon County Medical Society are continuing in the footsteps of past officers to make our society recognized as a model for other county societies. We are up among the leaders and hope to put up a real battle to be named the outstanding medical society of the state. Perhaps the most essential factor is the interest of every member. Your officers and your committee chairmen perform valuable service, but unless you are an active member, we can not maintain our place in the limelight. Some societies place their business relations in the hands of a few. Our policy is to have *every* doctor take an active interest.

Each member received a copy of the Secretary's letter from the state organization. It was thought by the Public Relations Committee that perhaps a letter expressing the unified thoughts of all the members of the society would be of value. The following quotation from a letter which was approved by the entire membership of the Committee, and which will be submitted to the members at Friday's meeting, expresses the general tone of the answer. "We do not believe that the government, and by this we mean whatever unit may be indicated, should subsidize in any medical care unless the other three necessities are likewise subsidized (meaning food, shelter, and clothing). We believe that the medical profession should stand solid on the principle that if the government is to pay wages (?) to such classes as WPA which enable them to purchase in the open market the three necessities, the amount should be increased so as to enable the employee to pay for the fourth necessity, that is, medical services." The rest of this letter will be read and discussed.—Extract from *Bulletin* of Muskegon County Medical Society, February.

ST. CLAIR COUNTY

A regular meeting of the St. Clair County Society was held Tuesday, February 4, 1936, at the Harrington Hotel, Port Huron, Michigan. President J. H. Burley presided. Twenty members and five guests were present. The president thanked our guest of the evening, Dr. E. D. Spalding of Detroit, for having come to Port Huron in very bad weather, in order to address the Society. Doctor Spalding gave a most interesting and very practical address upon "Differential Diagnosis of Heart Irregularities at the Bedside." After a wholesome and interesting discussion by members of the Society, our guest closed his subject by replying to the many questions arising during the discussion. A rising vote of thanks was given the speaker and the scientific program came to an end.

Afterward a prolonged business meeting was held during which many important subjects were discussed by the Society and several committee reports were made.

GEORGE M. KESL, M.D.
Secretary-Treasurer.

VAN BUREN COUNTY

At a meeting of the Van Buren County Medical Society at The Hartford House in Hartford, the Michigan State Medical Society set-up of "the filter system," for the care of indigent and afflicted patients, was discussed, with Dr. F. T. Andrews of Kalamazoo as speaker. It was resolved with enthusiastic desire that the Van Buren County Medical Society join with the Michigan State Medical

Society to make the set-up a 100 per cent success.

We had our Judge of Probate and one supervisor (from Paw Paw), also Dr. Myer, the Kellogg Van Buren County representative, with us. Our Judge of Probate and supervisor were very pleased with the idea. Our economic and medical filter committees will be appointed promptly and will be ready to function.

J. C. MAXWELL, M.D., President.

WASHTENAW COUNTY

A regular meeting of the Washtenaw County Medical Society was held at the Michigan Union on January 14, 1936, at 6:00 P. M. Dinner was served to eighty-one and about ninety attended the program which followed.

Dr. Norman Miller, the newly elected president, presided. He emphasized that it would be the policy of the Society to start dinner promptly at 6 o'clock and adjourn promptly at 8 o'clock, leaving the remainder of the evening free for other engagements or informal discussion.

The minutes for the meeting of December 10 were approved as printed on the program.

A report from the Committee on Public Relations was promised for the next meeting. The Board of Censors presented, with recommendation for election, the following qualified physicians: James L. Gillard, Harry A. Towsley, C. H. McIntyre, Eugene A. Hand, and R. C. Hildreth. The report of the committee was accepted and the gentlemen elected to membership.

A symposium on acute upper respiratory infections was conducted by Dr. A. C. Furstenburg with the following members participating: Dr. James H. Maxwell discussed acute rhinitis; Dr. R. W. Teed discussed sinus complications; and Dr. Furstenburg, who substituted for Dr. Dean Myers, talked about ear complaints.

The following doctors participated in the discussion which followed: Warren Forsythe, Lester Johnson, Leo Knoll, and others.

President Miller announced the re-appointment of the Public Relations Committee consisting of Doctors J. S. DeTar, L. J. Johnson, and J. J. Woods. He also reappointed the Committee on Public Health and Legislation. This committee consists of Doctors H. H. Cummings, Chairman; John Wessinger, and John Sundwall.

A committee was appointed to draw up resolutions concerning the late Dr. Rominger. This committee consisted of Dr. John Wessinger, Dr. Conrad Georg, Jr., and Dr. James Breakey.

President Miller brought before the Society the desirability of presenting to Dr. Yoder, the outgoing president, a gavel, on which the name of the Society, Dr. Yoder's name, and the year of his incumbency as president should be engraved.

A motion was made to the effect that this project be carried out and that the secretary be instructed to buy the gavel. The motion carried.

The meeting adjourned at 8:02 P. M.

JOHN V. FOPEANO, M.D.,
Secretary.

The teacher had labored long and patiently to teach little Arthur the points of the compass.

"When you stand with your face to the north, your right hand is toward the east, your left toward the west, and your back toward the south. Now, tell me the directions. What is in front of you?"

After a thoughtful pause, little Arthur replied: "My stomach."

WOMAN'S AUXILIARY

MRS. A. M. GIDDINGS, President, 22 Riverview Ave.,
Battle Creek

MRS. KENNETH LOWE, Secretary-Treasurer, 107 Elizabeth St., Battle Creek

MRS. L. C. HARVIE, Press Chairman, 341 Brockway Place, Saginaw



MRS. J. A. MCLANDRESS, Saginaw
Vice President of Woman's Auxiliary to the
Michigan State Medical Society

Doctors' wives throughout the state desirous of organizing an Auxiliary to their County Medical Society may obtain all necessary information by writing to Mrs. J. A. McLandress, 715 Court Street, Saginaw, Michigan.

Quoting from a letter of Mrs. Robert W. Tomlinson, Wilmington, Delaware, past president of the National Auxiliary, published in the *A. M. A. Bulletin*, June, 1935:

"To those women who are not members of the Auxiliary, I commend more highly than anything else the friendship gained through its members, the understanding of association with them, and the opportunity to be of service to the highest of professions. The Auxiliary extends to you its greeting and its cordial invitation not only to become a member, but share in its delightful programs and events."

The following articles appeared in the quarterly *News Letter* of the Woman's Auxiliary to the American Medical Association, issued in January, 1936:

Why an Auxiliary?

The campaign now well under way to form Auxiliaries to the County and State Medical Societies gives point to the question raised in the *Wisconsin Medical Journal*, "Why an Auxiliary?" We might as well ask, "Why a Wife?" says the writer, who dips his pen in effervescent ink and gives us this:

Medical organization went on for nearly a century in a state of single blessedness. Like an old bachelor it never seemed to realize that it was doing many odd jobs which could be done by a helpmate and that its standing in the community was being sorely neglected. Then one spring morning, some

ten years ago, came a comely lady, who announced herself as Mrs. Auxiliary, rolled up her sleeves, nudged Mr. Medicine in the side, and said, "Shove over—I'm going to pitch in, help get your house in order, and I'm going to be your partner."

The old fellow, unaccustomed to team work, grumbled and still sputters at times, but down in his heart realizes how efficient she has been. During the years she has grown and developed into a buxom housewife, on whom he has learned to depend more and more. She has been helpful in more ways than he realizes and she can do more and more for him as time goes on and he learns more to rely on her. *Her main job is to improve his standing in the community.* He has been a hermit and has covered up his sterling qualities and his good deeds. He has had few contacts with others and she can do much in bringing about a better appreciation of his work and of his worth. (*N. Y. State Med. Jour.*, Oct., 1935, and *Penn. Med. Jour.*, Dec., 1935.)

* * *

Information Concerning Exhibits

The American Medical Association has gathered considerable material on health and this has been made available in the form of exhibits suitable for use at expositions, fairs, schools and other places where the public may gather. The exhibits include such subjects as: Information about Health; Health Posters; a Hygeia Display; Dangers of Self Diagnosis; Food and Drug Legislation; Objectionable Cosmetics; Patent Medicines and Quackery, and many others. Auxiliary groups may secure any of these exhibits for use in their communities.

Reservations for any material desired should be made as far in advance as possible. The only expenses involved are transportation charges one way.

Responsibility for installation and demonstration of the exhibit material ordinarily must be borne locally for the American Medical Association does not have the personnel for such duties.

Further information may be obtained from Dr. Thomas G. Hull, Director, Scientific Exhibits, American Medical Association, 535 N. Dearborn Street, Chicago, Ill.

County News

Calhoun County.—At a meeting of the Calhoun County Auxiliary, Tuesday, February 4, at Leila Hospital, the members voted to turn over a sum of \$500, raised during the past few years, to help equip the nursery in the new General Hospital, to the general fund being raised by the Medical Society to help pay off indebtedness on the building.

An all-day session was enjoyed by about forty members at the Leila Nurses' Home. A sandwich luncheon was served at noon, Mrs. R. C. Winslow and Mrs. William Dugan acting as hostesses. Mrs. Dugan, president of the Auxiliary, presided over the business meeting, which was held in the afternoon, and appointed a committee to assist the doctors in further projects for raising the necessary funds for the new hospital, with Mrs. A. M. Giddings as chairman, and Mrs. Clifford W. Brainard, Mrs. H. F. Becker, Mrs. Joseph E. Rosenfield, Mrs. Fred J. Melges, Mrs. A. E. MacGregor and Mrs. Wendell L. Stadle as other members.

Miss Eva Ederle directed the sewing, and a number of surgical, obstetric and nursery supplies were completed. Sewing for Nichols and Leila Hospitals is one of the Auxiliary's most important projects.

LOIS M. UPSON, *Press Chairman.*

Eaton County.—Due to the condition of the roads, the December meeting of the Eaton County Auxiliary was cancelled.

The January meeting, attended by sixteen members, was held in Charlotte. Following the dinner, which was served at 7 o'clock at the Carnes Tavern, the members went to the home of Mrs. J. W. Davis, where they were entertained with a delightful program.

A piano solo, "Prelude in G Sharp Minor," by Rachmaninoff, was given by Mrs. Charles Stimson of Eaton Rapids, and two violin solos, "Sylvia," by Oley Speeks and "Romance," by Butler, were given by Mrs. Clinton Sevens of Charlotte, accompanied at the piano by Mrs. Lester Sevens of Charlotte. An interesting book review was given by our president, Mrs. Thomas Wilensky of Eaton Rapids, on "The Cross of Peace," by Sir Phillip Gibbs.

(Mrs. D. V.) MARIAN HARGRAVE,
Press Chairman.

Kalamazoo County.—Mrs. R. A. Marter, Oakland Drive, was hostess to the Kalamazoo County Auxiliary, on January 23. A cooperative dinner was enjoyed by twenty-six members. A short business meeting and social hour followed.

(Mrs. F. M.) WILMA G. DOYLE,
Press Chairman.

Kent County.—The Woman's Auxiliary of Kent County Medical Society began their activities October 2, 1935, with a "Tea" at the home of the president, Mrs. Henry Pyle on Morris Avenue at which plans for the year were discussed. The officers for the year are: President, Mrs. Henry Pyle; President-elect, Mrs. R. H. Denham; Vice president, Mrs. Paul Willits; Corresponding Secretary, Mrs. William L. Bettison; Recording Secretary, Mrs. Paul Kniskern; Treasurer, Mrs. Lynn Ferguson; Historian, Mrs. P. L. Thompson; Membership, Mrs. William J. Butler. Committee chairmen for the year are as follows: Program, Mrs. J. W. Rigterink; Social, Mrs. David B. Davis; Courtesy, Mrs. Carl F. Snapp; Press, Mrs. Thomas C. Irwin; Revision, Mrs. W. D. Lyman; Public Relations, Mrs. H. G. Robinson; Hygiene, Mrs. Arthur R. Woodburne; Legislative, Mrs. A. V. Wenger; Welfare Philanthropic, Mrs. G. H. Southwick.

The first meeting of the year was held October 9 at the Kent County Medical Society club rooms in the Medical Arts Building. Dr. J. B. Whitney was the guest speaker and gave a very interesting and instructive talk on "Disease and Its Effects on History." At this meeting, reports were given on the Annual Convention held at Sault Ste. Marie. We were very happy to learn that one of our active members and a past president was made President-elect of the State Auxiliary to the Michigan State Medical Society at this convention. "Tea" was served at the close of the meeting with Mrs. Lucian S. Griffiths and Mrs. L. Paul Ralph as hostesses. A rummage sale was held the following Saturday with Mrs. G. H. Southwick in charge and her committee, consisting of Mesdames Ralph, E. W. Schnoor, A. J. Baker, and A. V. Wenger.

Our November 13 meeting was held at the Medical Arts Building, with Rev. Ralph Higgins as guest speaker, his subject being, "Should Euthanasia be Permitted?" This difficult subject was handled in a very clever and safe way. An interesting discussion followed his talk. Tea was served, with Mrs. Dewey Heetderks and Mrs. A. Morgan Hill as hostesses. November 21, a most successful card party was sponsored by the Auxiliary to raise funds to place the health magazine *Hygeia* in local schools and in Kent County rural district schools. Mrs. Arthur Woodburne was general chairman, assisted by Mrs. A. V. Wenger, Mrs. Carl Snapp and Mrs. Henry Pyle.

**MICHIGAN'S DEPARTMENT
OF HEALTH**

C. C. SLEMONS, M.D., Dr.P.H., Commissioner
LANSING, MICHIGAN

December 11, Mrs. James Clair Mead gave a most enjoyable book review of "Silas Crockett" by Mary Allen Chase, at our meeting in the Medical Arts Building. Members were invited to bring guests. Tea was served with Mrs. Christian Krupp and Mrs. M. W. Shellman as hostesses. A most successful dancing and card party was given December 18 at the Rowe Hotel for the doctors and their wives. It was a "get together" affair and the first attempt of its kind here. It was so enjoyed by all that another party is planned for the near future.

January 8, Mrs. Milton M. McGorrell spoke on "Byways in Maine and its Pioneers," also showing many interesting antiques gathered during her residence there. Mrs. Donald Chandler and Mrs. W. G. Colvin were the hostesses for the day.

Another card party was given in the St. Cecilia Club House in the evening of February 1 with Mrs. David B. Davis as general chairman. Refreshments were served by a committee headed by Mrs. Paul Willits and Mrs. L. N. McKinley. This party was given to raise more funds to supply the magazine *Hygeia* in more rural schools. The Auxiliary is paying now for a year's subscription for 175 rural schools in Kent County.

At the meeting, held February 12, in the Kent County Medical Society club rooms, Mrs. Frank L. DuMond, as guest lecturer, gave an illustrated talk on "Our National Parks." Mrs. Murray M. Dewar has taken over the program chairmanship for the year on account of the illness of Mrs. J. W. Rigerink. Hostesses for the day were Mrs. W. W. Oliver and Mrs. M. S. Ballard.

(Mrs. T. C.) GRACE E. R. IRWIN,
Press Chairman.

Saginaw County.—The January meeting of the Saginaw County Medical Auxiliary was held on Tuesday, January 21, at 8:30 in the banquet hall of the Home Dairy Company. Mrs. M. G. Butler, president, presided at the business session. Plans were completed for a dinner-dance to be given in February and it was decided that the Auxiliary should act as co-sponsors with the South Intermediate School Parent-Teacher Association at a public relations meeting in April at which Dr. John Sundwall, of Ann Arbor, director of hygiene and public health, will talk on "The Correct Emphasis on Hygiene and Health."

A social hour followed, prizes at games being won by Mrs. J. A. Maurer, Mrs. William J. O'Reilly, Mrs. Stuart Yntema and Mrs. Adolph Przednowek. Mrs. William Pickett, who, with Dr. Pickett, will soon leave to make her home in Florida, was presented with a gift. Refreshments were served late in the evening.

* * *

The Gold Room of the Bancroft Hotel, Saginaw, was the scene of the annual "Bring-Your-Husband" dinner-dance on Thursday, February 6. About one hundred persons attended and were reluctant to leave when the party ended at midnight. Effective valentine decorations and a color scheme of red and white were used on round tables at which dinner was served. The centerpieces consisted of crystal bowls of red carnations and white snapdragons and lighted red and white tapers placed about the room, furnished light. The centerpieces were awarded later to those holding lucky numbers.

A short program followed dinner and included a rhythm tap by Kathleen Coffman, several Spanish songs by Beatrice Tafoya and novelty tap numbers by Caroline Rose Coffman, Jean Ostrander and Janet Maine. Coffman's orchestra furnished music for dancing.

(Mrs. L. C.) DELTA A. HARVIE,
Press Chairman.

Measles in 1936

The "Measles Season" is now approaching. It is not expected that there will be any great crop of measles this year following the bumper crop of last year. However, some communities were missed last spring and those that have not had an outbreak of measles during the last two years are very apt to be visited by this disease during the next two or three months. Physicians and Health Officers in each community should thus know whether to expect an outbreak.

It is a well known fact that measles has a high fatality rate for young children. Many deaths from this cause may be prevented if the time of exposure is known and the child comes to the attention of the physician sufficiently early to be given serum or whole blood within the first six or seven days. This procedure is too little used. The fault is not always ignorance on the part of parents. Some physicians fail to appreciate the importance of giving whole blood or serum for prevention or modification of the disease. Any one of three products may be used; whole blood taken from some individual who has previously had the disease, preferably one of the parents, given in amounts not less than 10 c.c.; second, convalescent serum made from the blood of individuals who recently had measles; third, placental extract. This latter product may be bought commercially, the dosages given in directions.

The Michigan Department of Health furnishes sterilized sodium citrate ampules to prevent clotting of whole blood and facilitate its administration. Any of these products, when used for complete prevention of an attack, should be given not later than four days from time of first exposure. If a modified attack is desired, then the injection should be delayed until the fifth or sixth day which is the optimum time for this purpose, although any time previous to the appearance of the rash may allow for some modification. A modified attack is desirable, because of the permanent immunity resulting, while the passive immunity following early injection of blood or serum is only temporary. More detailed information regarding prevention or modification of measles will be supplied by the Michigan Department of Health on request.

**News Notes—Bureau of Child Hygiene
And Public Health Nursing**

Dr. Ruth Stocking began an eight weeks' series of women's classes in Ionia County, January 13, 1936. Her enrollment for the first week was 267.

Dr. Bessey M. Shebesta began a series of women's classes in Genesee County, January 13, 1936, and the enrollment for the first week was 285.

Miss Julia D. Clock is conducting a series of child care classes in Wexford and Grand Traverse Counties.

Miss Bertha Cooper is conducting a series of child care classes in Sanilac County and Miss Annette Fox is conducting a similar series in Gogebic County.

Miss Nell Lemmer is beginning a prenatal nursing program in Mason County in coöperation with the Children's Fund county nurse.

Miss Martha I. Giltner has completed a six months prenatal nursing service in Cheboygan County.

OBITUARY

Dr. James H. Bogan

With the passing of Dr. James H. Bogan on Mackinac Island, January 21, 1936, the medical profession has lost one of its pioneers, the family doctor, universally looked up to and beloved in the community he elected to serve.

He went along quietly and unobtrusively, doing his duty as he saw it. It is seldom that any outstanding event brings the small-town doctor to the attention of the world outside his own orbit, but he is closer to the pulse of humanity, hears more clearly the rhythm of life than those who have much larger fields. The things the world never hears are the ones that endear him to all who know him. Knowing intimately the lives of those around him, he spends hours beside a sufferer's bed, instilling strength and giving sympathy combined with the art of healing. It is a service too often unrewarded. But who can say when a cheery word and a smile have turned the tide of battle for some discouraged soul and given him courage to live?

Unlike his fellow practitioner in a city, he does not have the help of hospital and nurses but must depend upon his own resources in any emergency. For instance, some years ago Doctor Bogan took into his own home, and operated upon a child of very poor people, thereby saving the child's life. He had no help except what his wife rendered him. That is one case we know of. How many acts of courage are never known! Surely God guides the hands and brain of such a man.

Many tales could be written of the unswerving devotion and love of his fellow man, but this will suffice as a tribute to one whom many will mourn, and in whose hearts and memories he will always live.

MRS. W. CHARLTON EDMISON,
St. Ignace, Michigan.

Dr. Arthur D. Holmes

Dr. Arthur D. Holmes of Detroit died at his home following an illness which had lasted since December 11, 1935, when he suffered a stroke. He was born in Chatham, Ontario, seventy-one years ago. He received his early education at the Chatham Collegiate Institute and his medical education at the McGill University, Montreal. He graduated from McGill in 1889, following which event he located in Detroit, limiting his work to pediatrics. In 1904, he spent a year in Vienna and in London pursuing postgraduate study. He was on the attending staff of the Children's Hospital for twenty years and later a member of the consultant staffs of both the Children's and Woman's Hospitals. Dr. Holmes was president of the Wayne County Medical Society in 1910 and trustee of the Society from 1910 to 1930. He was the leading spirit in the movement to provide the society with a permanent home, which was accomplished in 1910 when a property on High Street was purchased and fitted up as a medical building.

Dr. Holmes was president of the Detroit Academy of Medicine in 1901-1902; vice president of the Mississippi Valley Medical Association in 1911-1912; a trustee of the Detroit Tuberculosis Sanatorium, Fellow of the American College of Physicians, and member of the American Medical Association and of the Association of American Teachers of Diseases of Children. Since 1910, when he received his commission from President Taft, Dr. Holmes

had been a captain in the Medical Reserve Corps. During the World War, he was post surgeon at Fort Wayne, Michigan, in 1918-1919. He held membership in the Detroit Club, Country Club of Detroit, and the Witenagemote Club. Dr. Holmes had been a widower for many years, and had retired from active medical and surgical practice. He was a director of the Equitable Trust Co., Charles W. Warren Co. and of the Central West Casualty Co.

He is survived by two daughters, Mrs. Ernest Guthrie Davis of Detroit, and Miss Agnes Holmes, who made her home with her father, and two sisters, Mrs. George N. Watts, of Los Angeles, and Mrs. R. S. Wilson, of Detroit.

Dr. H. E. Kelly

Dr. Herbert E. Kelly of Ida died February 6, 1936, after an illness since June, 1935. Dr. Kelly was born in LaSalle, November 15, 1873. He received his early education at Monroe High School and his medical education at the University of Michigan where he graduated in 1899. He was married on May 7 to Miss Grace M. Middaugh, who survives him. Dr. Kelly was a member of the Monroe County Medical Society, the Michigan State and American Medical Association. Besides his wife, he is survived by two daughters, Mrs. Philip Wargelin of Ironwood and Miss Mary Kelly, at home, and a brother, Dr. Ellis W. Kelly in Toledo.

CORRESPONDENCE

A Museum of Hygiene

To the Editor:

The Hall of Science at the Chicago fair was visited by a large number of people who manifested a genuine interest in the material exhibited. Whenever objects of a hygienic nature are shown, it can be noticed that they elicit great attention. Almost any city of importance has an art museum, as it should. The question arises why any city of a large size should not have a Museum of Hygiene. Such a museum should contain anything which pertains to healthy living, proper housing, proper ventilation, lighting, heating, information concerning proper cooking, proper household utensils, in short, anything pertaining to proper living. The respective industries should be vitally interested in such a permanent exhibit.

The medical profession, no doubt, would be interested in a special department showing pathological specimens, and other objects. This department should be open only to the medical profession. Many valuable specimens could be exhibited. Also the newest methods of laboratory and other examinations could be demonstrated. In fact, there are so many possibilities for the good of the medical profession, and, simultaneously to the public, that there is no end to what can be accomplished. A proper board should keep a watchful eye on exhibits so that only those of unquestionable and tested value are accepted. The writer is informed that Chicago contemplates a museum of hygiene. In Buffalo exists an institution similar to the Hall of Science, I am told. Detroit, as the center of a large population, should make a beginning in Michigan. The museum should have an auditorium in which lectures can be delivered. There is, in my opinion, no better way to spread the knowledge of proper living than by such an institution. It will help to destroy

ignorance, superstition and prejudice and will aid all those agencies which work in the interest of better living and better thinking. Members of the medical profession should take a leading part in the establishment of such a museum because, by virtue of their calling, they are interested in any measures which serve to ameliorate conditions, which contribute to improve the health of the people and which help to add to their contentment and happiness.

Detroit, February 1, 1936.

EMIL AMBERG, M.D., Chairman,
Subcommittee on Museum of Hygiene,
Wayne County Medical Society.

A Medical and Surgical Museum

Editor Journal of the Michigan
State Medical Society:

We are starting a museum of old surgical instruments and medical appliances in the University Hospital for the benefit of our students and others interested. It is our hope to gather and place on display apparatus that has an historical value in that it will show graphically the progress of the art of Medicine and Surgery. I do not have a fund with which to buy objects for the museum and it is more than likely that one could not find objects of this sort on the market as they usually have lost their practical value. I therefore am soliciting gifts from those who have in their possession objects that might be of interest in such a museum. These objects may be given or loaned with the assurance that in either case they will be well cared for and, in the case of a gift, they will, of course, become the property of the University and due acknowledgment made to the person making the gift.

There must be a great many interesting items around the medical families of Michigan that should be in such a museum and I do not know of a better way to get this information concerning the starting of the museum to the medical profession than through the columns of your JOURNAL. It seems to me a worth while project and I would appreciate comment from you in regard to this matter in the JOURNAL if you deem it a worthy one.

FREDERICK A. COLLIER, M.D.

Ann Arbor, February 18, 1936.

Warning

Editor, Journal of the Michigan State Medical Society: It is our understanding that members of the Michigan State Medical Society are being invited to join in the development of a new industry in the State of Michigan by an individual who, in his invitation, stresses his former association with The Medical Protective Company.

We call your attention to the fact that this individual has not been connected with The Medical Protective Company for the past twelve years and we know of no reason for the use of our name in this undertaking.

Sincerely yours,

L. L. FRANK, *Vice President.*

Fort Wayne, February 14, 1936.

GENERAL NEWS AND ANNOUNCEMENTS

The One Hundred Per Cent Club of the Michigan State Medical Society

1. Ingham County Medical Society
2. Muskegon County Medical Society
3. Oceana County Medical Society
4. Ontonagon County Medical Society

The above county medical societies have paid dues in full for each and every member of the County and State Medical Society.

Opening for physician: Soldiers' Home, Grand Rapids. For further information write Dr. W. T. Hammond, Chief Surgeon.

* * *

Fifty cents (50c) is the annual expenditure in tax money for the health protection of the U. S. citizen. Police protection costs \$4.52 per person; fire protection, \$3.32.

* * *

The A. M. A. dramatized radio programs are presented every Tuesday afternoon at 5:00 E.S.T. over the N.B.C. network. Listen in. Suggest to your patients that they do likewise.

* * *

The Index to Advertisers is a new feature in THE JOURNAL. Have you noted the names of your friends in this list? Please tell them you saw and read their message.

* * *

The Arizona State Medical Association has employed a lay-secretary to handle the business and details of the executive office, located in Phoenix, Arizona, according to Dr. D. F. Harbridge, Secretary.

* * *

The Eaton County Medical Society has evolved an excellent plan by which every physician in the county serves on the Medical Filter Board. In this manner and on a rotating basis, the program will cover filter activity for the next twelve months.

* * *

The American Medical Association Convention will be held in Kansas City the week of May 11, 1936. If you plan on attending this big meeting, write for your hotel reservations at once. Four hotels are already filled to capacity.

* * *

As of February 14, the SERA case load for Michigan was 74,351, compared to 69,000 cases in our last month's report; the total on WPA as of February 21 was 96,610, compared to 101,000 cases last month.

* * *

Doctor, why not refer all detail men to the Executive Office of the Michigan State Medical Society for two reasons: (1) Advertising in your State JOURNAL; (2) exhibit space at the annual Meeting?

Dr. B. R. Corbus, Grand Rapids, has been appointed a member of the Advisory Committee on Postgraduate Education. This committee arranges the postgraduate programs and conferences of the State Society and the Department of Postgraduate Medicine of the University of Michigan.

* * *

The **Attorney General** has rendered an exhaustive opinion relative to the use of the title "Doctor," or an abbreviation thereof, by each of the several groups of the so-called healing arts. The opinion, dated January 15, 1936, is on file in the Executive Office of the Michigan State Medical Society.

* * *

The list of **presidents and secretaries** of the county medical societies is on page xviii of this issue of THE JOURNAL. The roster will be published in all subsequent numbers, for your convenience. Notices of any changes should be sent promptly to the Executive Office so that the list may always be accurate.

* * *

The **Florida Medical Association** will hold its 63rd Annual Meeting on the ocean-going liner "The Florida," April 27, 28 and 29, 1936. The boat will cruise around in the waters adjacent to the Bahama Islands, and will land at Havana on the second day out for sight seeing and a golf tournament. The boat expenses will be \$35.

* * *

What constitutes the **private practice of medicine**? "In the interpretation of the rules and ethics as applied to the practice of medicine: By the word 'practice' is meant the performance or application of medical knowledge."

From Judicial Council of the American Medical Association, approved by House of Delegates in 1927.

* * *

To every **county medical society**: Be sure you have sent to the Executive Office, 2020 Olds Tower, Lansing, the names of the men on your *economic filter*. In most counties, these men are the county poor commissioners or relief administrators. In a few counties, the probate judge has appointed a physician to aid in this social service work. Send in your list.

* * *

County Societies desiring to invite the Michigan State Medical Society to hold its 1937 meeting in their communities should send invitations to The Council two months before the date of the approaching Annual Meeting, which will be the week of September 20, 1936. This is covered in the Constitution, Article 7, Section 1.

* * *

A **Scientific Exhibits Committee** has been created by The Council of the Michigan State Medical Society. Physicians desiring to secure space for a scientific exhibit at the Annual Meeting of the State Society in Detroit next September are invited to write the chairman of the committee, Dr. C. T. Ekelund, 906 Riker Building, Pontiac, or the chairman of the particularly indicated Section.

* * *

The **Michigan Association of Alpha Kappa Kappa** was organized in Frankenmuth October 16, 1935. Dr. Homer A. Ramsdell of Manistee was elected president and Dr. Thomas J. Carney of Alma was chosen secretary. The first meeting was held in Flint, Saturday, February 8, 1936; the next session will be held in Detroit in September at the time of the Annual Meeting of the Michigan State Medical Society.

MARCH, 1936

The brief, "Who Wants Socialized or State Medicine!" which is being prepared by the Michigan State Medical Society, will be sent to every member of the Michigan profession in April. This digest will be followed later by a brochure on the same general subject presenting the facts on the socialization of medicine in a more fulsome manner.

* * *

In the **February number** of THE JOURNAL of the Michigan State Medical Society, it was announced in the article in the Cancer Survey of Michigan that Flint had fifty milligrams of radium. We have just received a letter from the supervisor of Hurley Hospital, Flint, that it now has available two hundred milligrams of radium for general radium service at the hospital.

* * *

The **Annual Beaumont Lectures** will be presented by the Wayne County Medical Society in the Detroit Institute of Arts on March 23 and 24, 1936. Dr. Charles A. Doan, Professor of Medicine and Director of the Department of Medical and Surgical Research, Ohio State University, will be this year's lecturer. All members of the State Society are invited to attend.

* * *

The **Annual Meeting of the Michigan State Medical Society** will be held in Detroit in September, 1936. Headquarters will be the Book-Cadillac Hotel. The meeting will start on Monday, September 21, with meetings of the House of Delegates, followed by a golf tournament and the scientific sessions. It is anticipated that upwards to 2,500 will register. Get your hotel reservations early.

* * *

"The health of the citizens of this county is our business and all we ask is the privilege of minding our own business." This statement, originated by Dr. Charles R. Dengler, president of the Jackson County Medical Society, might well be the slogan for all county medical societies in Michigan in their dealings with governmental agencies.

* * *

Dr. Norman F. Miller, president of Washtenaw County Medical Society, sends monthly messages to the membership of his Society. His February letter, in referring to the meetings of the Society, contains the following caution: "Stay away if you wish, but remember your wide-awake colleagues will be there. Plan now to invest two hours once a month in your County Society. It will pay you real dividends."

* * *

Dr. Alpheus F. Jennings of Detroit has been appointed by President Grover C. Penberthy as chairman of the Subcommittee on Postgraduate Medicine for the General Practitioner, which is a division of the Committee on Economics. Dr. Jennings will fill out the term of his father, the late Dr. Charles Godwin Jennings. Other members of the Committee are Drs. James E. Davis and Roy D. McClure of Detroit.

* * *

Dr. Arthur K. Northrop of Detroit was elected chief of staff of Providence Hospital, Detroit, for 1937. Dr. Northrop has been chief of the obstetrical division for the past year and has been a member of the hospital staff since its organization, twenty-six years ago. Dr. William P. Woodworth was elected secretary-treasurer. Under the plan of nomination and election, officers elected assume their duties a year hence. Dr. J. C. Jentgen will be chief of staff for 1936.

Definition of a physician: "A physician is one who has acquired a contemporary education in the fundamental and special sciences, comprehended in the general term 'medicine' used in its unrestricted sense, and who has received the degree of Doctor of Medicine from a medical school of recognized standing."

From Judicial Council of the American Medical Association, approved by House of Delegates in 1924.

* * *

The members of the Thirteenth General Hospital Unit, a reserve unit, were entertained at the officers club at Fort Wayne, Sunday, February 9, 1936. They were addressed by Captain W. J. Kinard, M. C., U. S. A., of Selfridge Field on, "The Organization and Function of the General Hospital in Times of Peace and War." The following members of the unit were present: Drs. B. H. Larsson, C. I. Owen, J. G. Slevin, E. G. Walker, G. C. Kreutz, A. E. Dreyer, W. R. Wreggitt, J. H. Law, R. M. Brown, and J. H. Maxwell.

* * *

The Loos-Ross ruling impresses the importance of every county medical society's constitution and by-laws being in conformity with those of the Michigan State Medical Society. The provisions as to membership should be uniform, otherwise the county medical society may find itself powerless to discipline an unethical member. Look over the Constitution and By-Laws of the Michigan State Medical Society, and see that your county medical society regulations agree with same.

* * *

"For years organized medicine has been ready and willing to give freely its advice and help on matters of public concern, but it is now faced with the alternative of meeting the competition for popular opinion created by pressure groups efficiently organized to sway the people, or of remaining silent and waiting for the public to come and ask for information, which it has not done and may not be expected to do."—From Committee on Medical Trends, Medical Society of State of New York.

* * *

"Michigan State Medical Society Night" was held in Genesee County on February 19, 1936. A report on this splendid meeting of 126 physicians and guests will be published in the April issue of THE JOURNAL. Oakland County will hold a Michigan State Society Night on Tuesday, April 21, 1936; Kalamazoo-Allegan-Van Buren County Medical Society is planning to hold a similar program in April or May; Wayne County also anticipates a State Society Night in the early Spring.

* * *

Wisconsin physicians are receiving warnings from their State Medical Society against combined collection agency-finance companies. Doctors are requested to inform the State Society of any companies seeking their business so that the legal and ethical aspects of the particular concern may be investigated. The Council of the Wisconsin State Society has taken formal action to protect physicians from certain types of collection procedures which "carry within themselves the seeds of their own destruction."

* * *

Dr. J. Earl McIntyre, Lansing; Dr. B. R. Shurly and Wm. J. Stapleton, Jr., Detroit, attended the Thirty-second Annual Congress on Medical Education, Medical Licensure, and Hospitals in Chicago on February 17 and 18. This yearly meeting is sponsored by the Federation of State Board of Medicine of the United States,

the Association of Medical Colleges, and the Council on Medical Education and Hospitals of the American Medical Association. Dr. McIntyre, secretary of the Michigan State Board of Registration in Medicine, was discussion leader at the sessions of February 18.

* * *

The Will Rogers Memorial Foundation will devote the income of the Will Rogers Fund solely to maintenance of children in existing preventoria. Children who are applicants must be certified as eligible by physicians who are specializing in tuberculosis. The only qualifications of the applicant must be citizenship and age limit of twenty-one years. According to the *Journal of the American Medical Association* for December 7, 1935, Michigan has one preventorium. If any Michigan physician desires further information, he may write Dr. Alex. Heron Davisson, City Chest Clinic No. 12, Division of Tuberculosis, Philadelphia, Pa.

* * *

County Medical Society Bulletins: The Bulletin of the Calhoun County Medical Society runs from eight to twelve pages monthly. It contains minutes and news items of interest to the membership, besides excellent medico-sociologic interpretations and warnings. The editor is Dr. Wilfrid Haughey of Battle Creek.

The Bulletin of the Oakland County Medical Society is being edited by Drs. Raymond G. Tuck and Ernest Bauer. The vigor of the editorials, and the thoroughness of news notes, together with a page of sparkling humor each month, make this twelve-page magazine a most readable publication.

Congratulations, Editors.

* * *

Afflicted child commitments in January, 1936, totaled 1,494 for the State. This includes 631 court orders from Wayne County for medical service performed during the preceding nine months—not in January, 1936. The net load for January was, therefore, the very low figure of 863 commitments.

Of the 1,494 cases reported, 1,393 includes all court orders on cases committed to any and all hospitals from January 1, 1936, to January 21, 1936, plus those committed to miscellaneous hospitals from January 21 to January 31. The University Hospital received 101 cases from January 21 to January 31. Future statistics of the Crippled Children Commission will separate University Hospital commitments from those of miscellaneous hospitals.

* * *

Adequate income provides for normal living and working conditions and a reserve for emergencies. On the other hand, insufficient income and unfavorable employment conditions reduce the family to a poor living level with (a) insufficient food; (b) inadequate clothing; (c) unhealthy housing; (d) bad psychogenic states. Subnormal health follows, and less effective work is a consequence. Disabling sickness, such as tuberculosis, heart disease, et cetera, is frequently the result of the above conditions. Good health and medical care in sickness require adequate living wages from which healthful living conditions and competent medical care can be provided.

* * *

"An Indian Chief named Chippewa, whose remains were buried on a farm in Victor, Clinton County, thought, in 1838, when smallpox was present in epidemic form, that he could relieve himself from the disease 'by leaping into a cask of cold water.' He was mistaken; but the fact that 'his burial-place is regarded with considerable respect' and that there was talk in 1880 'of inclosing it within a paling'

JOUR. M.S.M.S.

indubitably indicates that courage of medical conviction and enthusiasm in therapeutic endeavor are not wholly unappreciated."

The above few lines from the *Medical History of Michigan* indicates the sprightly humor and narrative interest which fills every page of this two volume work. The History can be ordered by dropping a post card to 2020 Olds Tower, Lansing. Price \$2.50 per volume.

* * *

In New York State, a bill has been introduced in the Assembly and the Senate which would prohibit the practice of medicine by hospitals. "This bill (Moran, Assembly Int. No. 920; Esquirol, Senate Int. No. 765) is a decree of divorce of professional fees from hospital charges. It prohibits hospital coöperations from becoming vendors of the physician's services, either diagnostic or treatment. The hospital cannot hire the doctor and sell his service 'for profit or loss.' In other words, it is a bill against the commercialization of medical care.

"There is no justification in the procurement of revenues from medical practice to meet the deficits of hospital administration. The principle that the hospital shall not make a profit on that service which only a licensed physician may render is sound. This principle must be maintained."

* * *

The Bay County Medical Society held a meeting on February 28 to which seventeen probate judges of Northeastern Michigan were invited for a full discussion of the filter system. Among the invited guests were: Judges Jas. G. Kress, Gratiot County, Ithaca, Mich.; R. J. Crandall, Arenac County, Standish, Mich.; David Davison, Iosco County, Tawas City, Mich.; Dage LaGoe, Midland County, Midland, Mich.; Dudley Kavanaugh, Bay County, Bay City, Mich.; John G. Schaeffer, Gladwin County, Gladwin, Mich.; John P. Murphy, Saginaw County, Saginaw, Mich.; H. Walter Cooper, Tuscola County, Caro, Mich.; Waldo J. Curtis, Isabella County, Mt. Pleasant, Mich.; Thomas Dorsey, Clare County, Clare, Mich.; George H. Bowman, Roscommon County, Roscommon, Mich.; Earl R. Chapin, Ogemaw County, West Branch, Mich.; Charles A. Haas, Montmorency County, Atlanta, Mich.; Lawrence P. Schrock, Oscoda County, Mio, Mich.; Harold P. Calkins, Otsego County, Gaylord, Mich.; Frank McAvinchey, Genesee County, Flint, Mich.; George Cuyler, Alcona County, Harrisville, Mich.

* * *

Judge Frank L. McAvinchey, of Genesee County, is chairman of the Michigan Probate Judge Association Committee which coöperated with the medical profession in sponsoring and effecting the filter system throughout the State of Michigan. Chairman McAvinchey sent the following communication on February 3 to all probate judges of Michigan:

Dear Judges:

Your committee is particularly interested in knowing two things. First, have you coöperated with your committee, the State Hospital Association and State Medical Society as outlined by your committee in its previous correspondence and if so what results have been obtained? The reports thus far have been extremely gratifying and many of the Probate Judges throughout the state have been using the Medical Filter for adults as well as juveniles and with wonderful results, saving their counties thousands of dollars from what would otherwise be useless hospitalization, and, second, what is your report on the results?

Your committee is intensely interested in having each county join with the medical and hospital group for the purpose of setting up as economical a system as possible and at the same time properly caring for the children, and is extremely interested in knowing just exactly what each one is doing and in seeing to it that we Probate Judges join in this move toward better medicine and toward saving expense as rapidly as we can.

Very sincerely yours,

FRANK L. McAVINCHEY, Probate Judge.

Some Facts About the Afflicted-Crippled Child Problem

The 1935 Legislature appropriated \$1,400,000 for each of the two years in the biennial period ending June 30, 1937, for the medical care of crippled and afflicted children. This was reduced immediately by 5 per cent (the Governor's economy measure) or \$70,000, and by payment of old bills in the amount of \$193,820.43. So the actual balance on hand at the beginning of the fiscal year (July 1, 1935) was \$1,136,179.57. The calculated need for the year was \$2,219,700, without physicians' fees. If physicians were paid only one-half of their normal fees for this type of patient, an additional \$3,300,000 would be necessary to carry on the work for one year. The Legislature, however, appropriated far too small a sum even for hospital care, not taking into consideration the payment of medical care.

During 1935-36, physicians operated on thousands of patients and gave protracted care to hundreds of patients with chronic and acute afflictions, including the long-time crippled child patient, *without receiving one cent* (despite the law which calls for reasonable compensation to physicians), except during the brief period from May 28 to June 30, 1935, when some few physicians who rendered bills were paid 50 per cent of the already halved fee! Based on the above estimate, therefore, the physicians of this State contributed over \$3,000,000 to the State of Michigan in one year!!!

Twenty-one booklets relative to state medicine, sickness insurance, and socialization of medicine are being packaged and mailed by the Michigan State Medical Society to 919 high schools, 246 public libraries and to 350 additional public and quasi-public organizations and to individuals in Michigan. Members are invited to write for a package, and to send the names of laymen to whom they wish such literature mailed. Please indicate whether you desire your name to be mentioned in the letter which will accompany the package sent to each person.

The pamphlets are the following:

1. Sickness Insurance Catechism.
2. Some Defects in Insurance Propaganda.
3. Sickness Insurance and Sickness Costs.
4. Sickness Insurance Not the Remedy.
5. A Critical Analysis of Sickness Insurance.
6. Prepayment Plans for Hospital Care.
7. Health Insurance in England and Medical Society Plans in the United States.
8. Group Hospitalization Contracts are Insurance Contracts.
9. Income from Medical Practice.
10. Group Practice.
11. Contract Practice.
12. New Forms of Medical Practice.
13. Handbook of Sickness Insurance, State Medicine, and the Cost of Medical Care.
14. Care of Indigent Sick.
15. Medical Service Plans.
16. Radio Debate on State Medicine.
17. Collecting Medical Fees.
18. Introduction to Medical Economics.
19. Some Phases of Contract Practice.
20. Medical Relations Under Workmen's Compensation.
21. Supplement to Income from Medical Practice.

The Michigan State Medical Society is highly indebted to the American Medical Association for supplying this excellent literature. Two tons of printed material were received in the Executive Office from Chicago immediately upon request!

Muskegon Celebrates "State Medical Society Night"

From all parts of Michigan, one hundred seventy physicians travelled to Muskegon on Friday, January 31, 1936, as guests of the Muskegon County Medical Society to celebrate "Michigan State Medical Society Night." Dinner was served at the Occidental Hotel followed by an address of welcome by Dr. C. M. Colignon, president. Dr. R. H. Holmes acted as toastmaster, and introduced Dr. John W. Rigerink, president of the Kent County Medical Society, and Dr. C. B. Mandeville, president-elect of the Muskegon County Medical Society, who spoke of the work of the public relations committee of the county during the past four years. Dr. Grover C. Penberthy, president of the Michigan State Medical Society, presented the "Five Year Program" of the State Society. "With honesty of purpose, we are all working for the best that can be given to the patient," said Dr. Penberthy. "Good medicine, good doctors, and conscientious effort to satisfy the public and give value received, is our aim."

"THE STATE SOCIETY IS YOU"

Dr. Henry Cook, chairman of The Council of the State Society, spoke of the present great activity of the Society and ended as follows: "The Michigan State Medical Society is *you*, Doctor, and it will be as strong as you individual members make it. The limitation of what the medical profession will reach in this state depends upon the limits of the energy and enthusiasm you put into your county and state society."

Brief addresses were given by Dr. C. T. Ekelund, Secretary of the State Society; Dr. George L. LeFevre, Muskegon; Dr. B. R. Corbus, Grand Rapids; Dr. L. G. Christian, Lansing; Dr. Thomas P. Treynor, Big Rapids, Councilor of the 11th District; Dr. V. M. Moore, Grand Rapids, Councilor of the 5th District; Dr. Paul R. Urmston, Bay City, Councilor of the 10th District; Dr. L. E. Holly, Secretary of Muskegon County Medical Society; Dr. A. G. Sheets, Eaton Rapids; Dr. Irving W. Greene, Owosso; Dr. L. Fernald Foster, Bay City. Also introduced were Dr. Henry J. Pyle, J. D. Brook, A. V. Wenger, and John Whalen, Secretary of the Kent County Medical Society, all of Grand Rapids; Dr. Dean W. Hart, St. Johns, and Wm. J. Burns, Executive Secretary of the State Society.

At the conclusion of a very happy evening, a rising vote of thanks to the Muskegon County Medical Society was given on motion of Dr. T. E. Andrews of Kalamazoo.

ONE HUNDRED SEVENTY PRESENT

Among those present were:

Drs. Henry J. Pyle, Harold D. Crane, Cullen E. Sugg, Walter Jaracz, Alfred Dean, Wm. R. Vis, David B. Davis, Leland McKinlay, Joseph F. Whinerey, M. S. Ballard, Shattuck W. Hartwell, R. Earle Smith, James C. Droste, Athal B. Thompson, Geo. L. Bond, W. M. Burling, H. C. Swenson, D. B. Hagerman, R. E. Kelly, H. P. Kooistra, O. H. Gillett, W. Dixon, Wm. H. Veenboer, Ruben Maurits, Henry J. VandenBerg, W. H. Steffensen, John Whalen, P. W. Bloxsom, M. M. Dewar, John N. Wenger, Donald M. Morrill, R. H. Denham, A. R. Woodburne, A. R. Heyford, W. S. Vaun, R. H. Spencer, C. G. Krupp, M. M. Marrin, Garnet Stonehouse, F. A. Adams, A. Potts, Lynn A. Ferguson, Ward L. Chadwick, E. W. Dales, Ward S. Ferguson, Paul W. Kniskern, C. Howard Southwick, Torrence Reed, Ferris Smith, William R. Torgerson, Alexander M. Campbell, E. N. Nesbitt, Alexander M. Martin, Wm. J. Butler, Merrill Wells, Lucian S. Griffith, E. B. Anderson, Wm. L. Bettison, C. DeJong, J. E. Meengs, C. H. Snyder, Wm. F. Reus, L. Paul Ralph,

Don B. Cameron, Andrew VanSolkema, Robert Lover Laird, W. B. Mitchell, S. Epstein, D. Glassman, M. Diacovo, A. Gano, Leon E. Sevey, Albert R. Bellerue, Earle J. Byers, Alden H. Williams, A. J. Baker, John N. Holcomb, Chas. V. Crane, James S. Brotherhood, John F. Failing, John R. Rogers, S. M. Mole, J. D. Miller, J. D. Flynn, Paul W. Willits, E. W. Schnoor, Carl Snapp, J. D. Brook, F. A. Votey, all of Grand Rapids, Dr. W. B. Bloemendal of Grand Haven, Dr. P. Drummond of Grant, Dr. S. J. Drummond of Casnovia, Dr. L. W. Switzer of Ludington, Dr. S. W. Thieme of Ravenna, Dr. F. T. Andrews of Kalamazoo, Dr. C. W. Brayman of Cedar Springs, and Dr. B. W. Morse of Whitehall; Drs. Ralph V. August, F. W. Hannum, A. F. Harrington, C. B. Fleischman, F. Diskin, Carl Pangerl, John Heneveld, Sam Jackson, Eugene W. Lange, W. C. Swartout, F. M. Boonstra, R. J. Harrington, Thomas Kane, D. R. Boyd, A. W. Mulligan, H. J. Kerr, Norman A. Fleischman, Henry Strauyer, Emil S. Lauretti, Emory L. Kniskern, Frank W. Garber, Sr., Constantine Oden, H. B. Loughery, F. H. Bartlett, H. F. Closz, Ethel H. Omori, Fred N. Morford, M. Keilin, Pitt Wilson, P. Medema, M. E. Stone, Chas. A. Teifer, A. A. Spoor, Frank W. Garber, Jr., John L. Loomis, A. B. Egan, S. G. Cohan, V. S. Lacerin, Robert J. Douglas, Edw. O. Foss, E. M. Pettis, Iva Lickley, Lunette I. Powers, all of Muskegon.

* * *

The Michigan State Medical Society has been informed that with the increase of the personnel of the Army, there has been no proportionate increase in the Medical Corps. It is urgently requested that full consideration be given to the need for the proper number of medical officers to meet the needs for the purpose of maintaining the health standards of the Army. In this connection, it is urged that sufficient appropriations be made to allow restoration of the medical section of the ROTC in our schools and universities. Continued education of our medical students is desirable in order that they may secure reserve commissions upon graduation, thus helping to maintain the Medical Reserve at a strength which will be sufficient in case of a National emergency. In continuation of this and in order to maintain a sufficient reserve, it is also recommended that Congress make sufficient appropriations to train those Medical Reserve Officers already appointed at summer camps, et cetera.

* * *

Dr. A. O. Hart of St. Johns Honored

A testimonial dinner was given by the Staff of Clinton Memorial Hospital on Tuesday evening, January 21, 1936, in honor of one of the pioneer surgeons and highly esteemed physicians in central Michigan, Dr. A. O. Hart, who is now compelled to retire on account of poor health.

The dinner was attended by physicians from Lansing, Owosso, DeWitt, Ovid, Ithaca, Alma and the Staff members of Clinton Memorial Hospital, numbering about 40. Dr. Frederick Collier, Prof. of Surgery of University of Michigan, was the guest speaker for the evening. With him were also Dr. Thiem and Dr. F. J. Hodges, the latter, Prof. of Roentgenology of the University of Michigan.

Dr. G. H. Frace, Chief of Staff of Clinton Memorial Hospital, acted as toastmaster for the occasion. Brief remarks eulogizing the honored guest were made by Hon. Wm. M. Smith, prominent local attorney and chairman of the Michigan Public Utilities Commission, and Dr. H. F. Kilborn, who also presented Dr. Hart with a Staff doctor as a token of the Staff's appreciation for the Doctor's efforts in helping to place Clinton Memorial Hospital on the

approved list of accredited hospitals of the U. S. and Canada. For this and many other noble deeds that Dr. Hart had performed in the relief of suffering humanity, the Staff and his professional brethren took this opportunity to pay him tribute.

* * *

Medicine in the Orient

In one mail, during February, we received two exchanges from the Orient—one, the *Journal of Severance Union Medical College*, Seoul, Korea. This is a very scholarly publication, edited by Myung Hak Choi. It contains two rather lengthy papers entitled, "Carcinoma of the Small Intestine," and "A Preliminary Study of the Diet and Customs of the Korean People, With Relation to Their Oral Conditions." There is a third article in German, entitled "Über den Einfluss des Capsicum Annum auf Serum Protein." There are no advertisements in the Korean medical journal. The longer articles are well written in English.

The other medical journal mentioned is that of Calcutta, India, edited by Satinath Begchi. This journal shows marked English influence, even in the character of the advertisements, and in type it is distinctly English. It contains two original articles—one on "Drug Adulteration and Spurious Drugs in India," by R. N. Chopra, and the other on "Hæmatological Studies in Indian Women." There is also a case report on "Acidosis Factor in the Pathogenesis of Diabetes," by B. C. Roy and H. N. Mukherjee. The authors have degrees from English Universities and Medical Colleges.

* * *

The filter system of the Michigan State Medical Society has made many friends for physicians among the probate judges and poor commissioners of the State. This was to be expected as the program has cut down the intake of afflicted child cases to a minimum and saved money for the State and counties.

The following letter from Hon. Merle H. Young, Probate Judge of Van Buren County, is typical of the satisfaction expressed on all sides for the medical profession's work in this emergency:

Dr. J. C. Maxwell, President,
Van Buren County Medical Society,
Paw Paw, Michigan.

Dear Dr. Maxwell:
I wish to take this opportunity to assure you that I am anticipating some very beneficial results from the new "filter" system, which your society and this Court are about to put into operation in this county.

I believe that the new system will tend to clarify situations and will be productive of even better understanding than we have enjoyed in the past.

I also wish to assure you of my appreciation of the co-operation of the medical fraternity in this county, in the many matters which it has, together with this Court, been interested in, the past few years.

May I suggest that the first meeting of the medical filter be held with the Court and with the economic filter, at a date which you may name.

Very truly yours,
MERLE H. YOUNG, Probate Judge,
Van Buren County, Paw Paw, Mich.

February 13, 1936.

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column and this will be deemed by us a full compensation to those sending them. A selection will be made for review, as expedient.

A MANUAL OF THE COMMON CONTAGIOUS DISEASES. By Philip Moen Stimson, A.B., M.D., Assistant Professor of Clinical Pediatrics, Cornell University Medical College; Visiting Physician, Willard Parker Hospital; Chief of Staff, The Floating Hospital of St. John's Guild; Associate Attending Pediatrician, The New York Hospital; School Physician, The Horace

Mann Schools, 1919-1923; President, The School Physicians Association, 1928-1930. Second edition, enlarged and thoroughly revised, published, 1936. 12mo, 439 pages, illustrated with 53 engravings and 3 plates. Limp binding, \$4.00, net.

Contagious disease will always constitute an important part of the work of the general practitioner in spite of the fact that particularly in the larger centers, many contagious diseases are cared for in municipal hospitals. A great deal has been and is being accomplished in the way of diagnosis, immunization and treatment; a fact which makes a timely revision of any work on the subject important. Stimson's book is a masterpiece of the art of book making as well as authorship. The contents include a new chapter on smallpox. The newer conceptions of whooping cough and of poliomyelitis vaccines are included. This second edition also presents the rapid method of culturing diphtheria bacilli, the use of antitoxin in meningococcus meningitis and of placental extract in the prevention of measles. The nature of serum reactions and of scarlet fever, the pathology of various diseases, particularly poliomyelitis and the management of various types of "croup" have been considerably clarified. The work can be heartily recommended as a serviceable manual on the common contagious diseases.

DISEASES OF THE SKIN. By Frank Crozer Knowles, M.D., Professor of Dermatology, Jefferson Medical College; Colonel, Medical Reserve Corps, United States Army. Member of the American Dermatological Association. Third edition. Thoroughly revised with 240 illustrations and 11 plates. Philadelphia: Lea and Febiger, 1935.

In revising this work for the third time, the author tells us that one-third of the contents is entirely new. The work contains among other things the latest conceptions of eczema. Adequate space has been allotted to allergy and allergic skin reactions. In a work of this nature, diagnosis is of the utmost importance and is accorded the space demanded. The work is especially strong in the matter of therapy. Numerous prescriptions are given in detail with their indications and under the heading Special Methods of Treatment the author describes vaccine therapy, bacteriophage, autohemotherapy, refrigeration, electrolysis, actinotherapy, x-ray therapy and lastly Grenz-ray therapy. The work will be found of practical value for the general practitioner. It is needless to say very few general practitioners are equipped to deal with many forms of skin disease. Since, however, the general physician is usually first to be consulted, it is necessary that he should be familiar with the more common dermatoses.

NEW MINDS FOR OLD—The Art and Science of Mind Training. By Esme Wingfield Stratford, D.Sc., M.A. New York: The Macmillan Company, 1935.

New Minds for Old is a very entertaining book. It is not as the title might imply, a book of short cuts to mental development. There is a chapter dealing with health and hygiene, but in a very sensible orthodox fashion; others are memory, concentration, control of temperament, faith healing and suggestion. Even dealing with this last topic the author keeps both feet on the ground. There is none of the nonsense we usually get when a layman writes on such topics. The work is rather long, 450 pages, but the humorous style of the author is sufficient to sustain one's interest to the end. The author is an experienced writer and a scholar to boot, having already to his credit a monumental work on British civilization as well as several on life and times of the Victorian era. While not a medical work, medical readers will find New Minds for Old a thought-provoking book.

THE 1935 YEAR BOOK OF GENERAL SURGERY.
 Edited by Evarts A. Graham, A.B., M.D., Professor of General Surgery, Washington University School of Medicine; Surgeon-in-Chief of the Barnes Hospital and of the Children's Hospital, St. Louis. Price, \$3.00. The Year Book Publishers, Incorporated; 304 South Dearborn Street, Chicago.

This book of 838 pages does for surgery what the Year Books on Medicine and Radiology already reviewed in this JOURNAL do for these specialties. The year's contributions and advances are recorded covering the entire field of surgery. Such a work includes a review of surgical literature; it is well documented with foot notes affording ready reference to the papers cited or abstracted. The thoroughness in preparation is in keeping with other volumes which have appeared. The work is well illustrated. As a general survey of surgery, the book should find a place in every physician's library whether he confines his practice to surgery or not.

THE 1935 YEAR BOOK OF GENERAL MEDICINE.
 Edited by George F. Dick, M.D., Lawrason Brown, M.D., George R. Minot, M.D., S.D., F.R.C.P. (Hon.), Edin., William B. Castle, M.D., A.M., William D. Strand, M.D., and George B. Eusterman, M.D. 850 pages. Price, \$3.00. Chicago: The Year Book Publishers, Inc., 304 South Dearborn Street, 1935.

This book of 850 pages is a survey of medical progress during the past year. Such a survey might be of little value or it could be able and thorough. The names of the editorial board are sufficient to assure the reader that the digest of current medical writing on general medicine has been made by men possessing the necessary qualifications for such a task in a high degree. The contents are as follows: Infectious Diseases, Diseases of the Chest, Diseases of the Blood and Blood Forming Organs, Diseases of the Gastro-intestinal Tract, and Diseases of Metabolism and Nutrition. A good habit to acquire would be to procure this year book for 1935 and, having digested it, *place standing order for 1936*, and succeeding years.

Veneral Disease Information is a monthly publication prepared by the U. S. Public Health Service for distribution among the medical profession throughout the United States. It measures approximately 6 by 9 inches and ranges in size from twenty-five to seventy-five pages.

It is the purpose of the Public Health Service in issuing this publication to provide in condensed form a monthly summary of the scientific developments in the diagnosis, treatment, and control of syphilis and gonorrhea. More than three hundred American and foreign journals are reviewed for this work. Abstracts are made of articles describing laboratory, pathologic, and clinical work in the field of venereal diseases.

The most important literature on every phase of the subject is presented in the form of brief abstracts that are easily read. An index for the year is published with the December issue.

The cost of this publication is only fifty cents per annum, payable in advance to the Superintendent of Documents, Government Printing Office, Washington, D. C.

Current Legal Thought, for the month of October, is devoted to medical jurisprudence. This number contains three extensive sections as follows: The Law of Medical Practice over eighty pages, Medical Jurisprudence, and a chapter on Preventive Law. There are so many interesting things in this volume that it is difficult to make a selection. It is published by Current Legal Thought, Inc., 245 Broadway, New York.

The Specific Treatment of Lobar Pneumonia

William P. Belk, Ardmore, Pa. (*Journal A. M. A.*, Sept. 14, 1935), tabulates the results obtained in the specific treatment of lobar pneumonia. These include all the reports in the American and foreign literature up to January, 1935, that lend themselves to statistical study. In Table 1, pneumococcus antibody solution is seen to be definitely beneficial in Type I pneumonia, less so in Type II, and of little or no value in Type III pneumonia. Surprisingly, it is more effective in Group IV than in Type I infections. In Table 2, antipneumococcus serum is seen to reduce the mortality in Type I lobar pneumonia by 40 per cent and to save ten lives per hundred cases. It is of less value in Type II but of distinct benefit in Types VII and VIII. Table 3 shows an average reduction in mortality of about 50 per cent, with a saving of twenty lives per hundred cases. The 78 per cent reduction in mortality in Type II pneumonias, with a saving of fifty lives per hundred cases in the selected series of Cecil and Plummer, is worthy of special mention. This table illustrates the importance of beginning specific treatment as early after the onset of pneumonia as possible. Table 4 shows that some benefit doubtless results from intramuscular and subcutaneous injections of specific preparations, but this is clearly smaller than after intravenous administration. At present these substitute methods would seem to be justified only when it is impossible to use the intravenous route. Table 6 gives a summary of the incidence of reactions as recorded in the several reports. The figures are only approximate. When precautions are taken to make skin and ophthalmic tests, and to refuse serum to those with positive ophthalmic tests and also to those with a history of allergy to horses, the question of reactions appears not to be a serious one. The specific treatment of pneumococcic infections is probably destined to increase in popularity. Serums will doubtless be still further refined, with the result that reactions will be largely eliminated and larger initial doses will be possible. The demonstrated merit of specific therapy in lobar pneumonia would seem to justify its use in bronchopneumonia and other pneumococcic infections, such as mastoiditis, thus giving it a wider field of usefulness.

CLASSIFIED ADVERTISEMENTS

MORPHINE AND OTHER DRUG ADDICTIONS—Institutional care and treatment of selected patients who have responsibilities, wish to make good and learn how to keep well; methods easy, regular, humane. Twenty-eight years' experience. Dr. Weirick's Sanitarium, Elgin, Ill.

DR. CHARTERS' MATERNITY HOSPITAL

A private hospital and home for young women desiring seclusion. Patients accepted any time during gestation. Rate reasonable.

FLUSHINGMICHIGAN

THE JOURNAL

OF THE

Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. 35

APRIL, 1936

No. 4

PERICARDITIS COMPLICATING SUBACUTE BACTERIAL ENDOCARDITIS

WILLARD D. MAYER, M.D.†
DETROIT, MICHIGAN

Subacute bacterial endocarditis is neither a rare nor unusual clinical condition and a voluminous literature has arisen regarding this entity since the original articles of Libman were first published. However, a rather remarkable and interesting phenomenon occurs in connection with this disease, that has always been a source of interest, in that with an evident general infection by non-hemolytic streptococci circulating actively in the blood stream, with at times numerous emboli lodging in various sites, secondary abscess formation practically never occurs. This same organism (non-hemolytic streptococci) can and does cause many septic phenomena, as, for example, acute otitis media with secondary mastoid infection, lateral sinus thrombosis, postpartum infection, etc. Yet in a condition with the chief source of circulatory activity, the heart, involved and apparently the center from which infective emboli originate and are scattered rather promiscuously throughout the body, one rarely sees anything suggestive of pus formation. Some writers state that this is due to the low virulence of the germ involved, which may be a factor; however, this germ in association with subacute bacterial endocarditis nearly always causes death, and, further, it seems to resist any and all forms of sero, and chemotherapy that have been devised to attempt a cure. It has been suggested that the germs are in too few numbers to cause breaking down of tissues and abscess formation, and likewise that the emboli in themselves are sterile. However, at autopsy it is a common procedure to isolate non-hemolytic streptococci from cultures made directly from the vegetations upon the heart valves

and it is portions of these same vegetations which can and do constitute the emboli.

In the event that some purulent condition is found in connection with subacute bacterial endocarditis, there is generally some other factor, as secondary invasion of the blood stream by some other organism or some co-existing lesion which in itself can have a purulent complication.

The case which I wish to report in detail with autopsy findings, presented upon admission, the usual findings of subacute bacterial endocarditis and later developed nephritis with terminal uremia and pericarditis with effusion. There were physical signs of pneumonia at the left base which I believe were due to compression of the lung by the distended pericardial sac. It is regretted that cultures and smears were not made of the pericardial effusion and that studies were not made in an attempt to reveal its exact composition; however, Gram stains made from the pericardium disclosed Gram-positive cocci and a few Gram-negative short chains.

†Dr. Mayer is Associate Professor of Clinical Medicine, Wayne University; Associate Attending Physician, Harper Hospital; Attending Physician, Detroit Receiving Hospital.

Case Report

J. G., female, white, aged thirty-eight, was admitted to Detroit Receiving Hospital, July 16, 1933. Expired August 5, 1933.

This patient was admitted to the hospital complaining of chills and fever of six weeks' duration, during which time she had an average of two chills

There was anisocytosis and poikilocytosis. The total N.P.N. on admission was 33.3, blood sugar 72. On August 4, 1933, the day before death, total N.P.N. was 200 mgs.; urea 295.6; uric acid 11.4; creatinine 4.5. On August 5, N.P.N. was 200 mgs.; urea 410; uric acid 13.3; creatinine 5.2, platelet count, 371,200.



Fig. 1. Extensive masses of friable vegetations upon the aortic valves.



Fig. 2. The shaggy appearance of the heart is due to the marked fibrinous pericarditis.

per day. There was a loss of 10 pounds in weight. At the age of fourteen years she had a severe attack of scarlet fever and rheumatic fever. There were frequent sore throats until six years ago, at which time her tonsils were removed. Six months prior to admission she had swelling of the ankles. During her stay in the hospital she ran an irregular temperature varying from 99 degrees to 105.4 degrees. In addition she had severe chills.

On physical examination the patient was found to be acutely ill, the skin was of a *café au lait* color approaching brown. Definite petechiae were seen in the left lower conjunctival sac. Tonsils had been well removed. Teeth in fair condition. The heart was enlarged, the left border being in the anterior axillary line and the right border at the right margin of the sternum. At the apex were heard a presystolic and systolic murmur, the latter being transmitted to the axilla. A systolic murmur was also heard over the aortic and pulmonic areas. Along the left border of the sternum in the fourth interspace there was definite loud pericardial friction rub. There was impaired resonance over the left base with diminished breath sounds. Subsequently bronchial breathing was heard over this area. Blood pressure was 106/72.

The spleen was not palpable nor did it percuss enlarged. The knee jerks were present. There were no tender nodules on the toes nor finger tips. The joints were neither painful nor swollen.

The patient became profoundly ill. The pericardial friction rub persisted. Fresh petechiae appeared and three days before death the patient became unconscious.

Laboratory examinations.—Urine: Sp. Gr. 1015. Albumin—trace. Sugar—negative. Microscopic—a few leukocytes. Occasional erythrocytes.

Blood Cytology: Hgb. 5.6 gms., R.B.C. 2,490,000, W.B.C. 27,700.

Polys. Nonfil. 6, Polys. Fil. 87, Baso. 1, Lympho. 5.

Kolmer and Kahn tests gave negative findings.

Blood culture made July 21, 1933, showed a non-hemolytic streptococcus.

A portable x-ray examination of the chest made on August 3 showed marked generalized enlargement of the cardiac shadow suggesting a double mitral type of heart although pericardial effusion could not be ruled radiographically as a portable picture in the prone position was taken.

(Signed) DR. KENNING.

Electrocardiograph made July 26, 1933, showed sinus tachycardia and slight right ventricular preponderance.

The clinical diagnosis was: (1) Subacute bacterial endocarditis; (2) pericarditis with effusion; (3) terminal uremia.

Autopsy report was as follows:

External appearance: Subject is a normally developed but emaciated, middle-aged, adult, white female. There is a brownish tint to the skin and many petechiae, the largest being 1 mm., and are scattered over the neck and trunk.

Thoracic cavity:

The left lung lies free in the pleural cavity. The upper lobe is grossly normal but the lower lobe is non-air containing. It is firm and congested. The right lung shows a few recent adhesions in the apex and is grossly normal. The pericardial sac is distended with 850 c.c. of brown fluid. The heart is enlarged and presents a shaggy appearance of fibrinous pericarditis. It weighs 460 grams. The aortic valve measures 8.5 cm. The cusps are markedly thickened and sclerosed. Extending around the base of the valves is a mass of friable vegetations, 1 cm. wide. The mitral valve measures 7 cm. and shows evidence of sclerosis, especially marked in one area. The pulmonic valve appears normal except for one small vegetation about 2 mm. in diameter. The tricuspid valve measures 11 cm. and appears

normal. The left ventricle measures from 15 to 20 mm. in thickness. The right ventricle measures from 7 to 10 mm. The coronary vessels are normal. The aorta presents a few whitish plaques but is otherwise normal.

Abdominal cavity:

The liver is of normal size and on section shows chronic passive congestion. The spleen is normal in size and shows multiple small infarcts. The kidneys appear slightly smaller than normal and on section the cortex is pale. One kidney reveals an infarct, about 1 cm. in size. The pancreas is grossly normal. The uterus is small and firm. A small cyst, about 1.5 cm. in diameter is felt on the right ovary. The left ovary is normal on palpation.

Gross summary:

1. Acute vegetative endocarditis of the aortic and pulmonic leaflets.

2. Old rheumatic deforming valvulitis of the aortic and mitral valves (Aortic Stenosis).

3. Fibrinous pericarditis with effusion.

DUNCAN A. CAMERON, M.D.,
Resident in Pathology.

Microscopic examination gave the following findings:

Heart: There are many small areas of perivascular nodular aggregations of lymphoid and endothelial cells. There are small areas of fibrous tissue replacement about the blood vessels.

Lung: The alveoli are filled with a fibropurulent exudate.

Aorta: There is a fibropurulent exudate over the pericardial covering of the aorta.

Aortic Valve: There is a considerable inflammatory cell infiltration, the cells consisting chiefly of mononuclears. There is a necrotic debris, fibrin and colonies of organisms deposited upon the valve and throughout this deposition there is an inflammatory cell infiltration.

Mitral Valve: Mitral valve showed old rheumatic valvulitis.

Liver: There is a rather marked degree of chronic passive congestion.

Kidney: Several small vessels contain emboli. There is also an area of infarction with many small abscesses within the necrotic tissue.

Spleen: There are small areas of infarction with emboli and beginning necrosis of the pulp. Gram stains show huge colonies of cocci in clumps.

Final Diagnosis: (1) Subacute vegetative aortic and pulmonic endocarditis, (2) old rheumatic deforming valvulitis of the aortic and mitral valves (aortic stenosis); (3) subacute to chronic rheumatic fibrinopurulent pericarditis with effusion.

OSBORNE A. BRINES, M.D.,
Pathologist.

Libman³ states:

"Pericarditis is not a part of the clinical picture. It might well occur as the result of the presence of pneumonia or some other complication, or it might represent a mixed infection with rheumatic fever."

Blumer¹ in a review of 150 cases of subacute bacterial endocarditis states:

"The pericardium does not, as a rule, show marked lesions. Obliteration of the pericardial sac is recorded in 3.3 per cent of the autopsies, and an equal percentage shows varying degrees of hydropericardium. Subpericardial ecchymoses are common, and acute or subacute pericarditis is noted in 4.6 per cent of the records."

"The rôle of infection, other than the original

sepsis, is not a striking one in subacute bacterial endocarditis. Nevertheless it is interesting to note that lesions denoting secondary infection are by no means unknown. Terminal bronchopneumonia is noted twelve times in the 150 autopsies, and this figure would doubtless have been larger if histological examinations had been made in all cases. Lobar pneumonia is noted three times, pleurisy twelve times, and perihepatitis once. There are also inflammatory lesions which seem clearly to be expressions of the embolic manifestations of the original sepsis, abscesses in the myocardium, abscesses in the lung, abscesses of the liver, acute pericarditis, acute peritonitis, acute meningitis, tracheo-bronchial or intraperitoneal lymphadenitis and subcutaneous abscess. The autopsy bacteriology in most of the recorded cases is unfortunately too incomplete to permit us to say definitely whether the original infection or secondary infection caused these focal lesions. Certainly from clinical experience it is reasonable to assume that in some instances death is due to terminal infection with organisms other than those causing the endocarditis; terminal erysipelas or terminal pneumonia for example. This, of course, might be expected from analogy with other protracted infectious diseases, such as leprosy or tuberculosis, the subjects of which not infrequently succumb to infection with more virulent organisms."

"The striking feature of the embolic manifestations of subacute endocarditis as contrasted with these occurring in the acute form of the disease is the lack of suppuration. However, it is to be noted that in the 150 autopsies septic infarcts or focal abscesses were noted twenty-three times. Among twenty-four instances of pulmonary infarction there were three infarcts that suppurred, in 115 infarcted spleens suppurating infarcts were noted in sixteen, in sixty-four infarcted kidneys suppuration was noted twice and among thirty-five brains showing evidence of embolism two showed abscesses. As mentioned previously there were three instances of abscess in the heart muscle, and one or two instances of localized subcutaneous suppuration. Failure of the emboli in various organs to produce suppuration is, therefore, relative rather than absolute. Indeed in certain instances where multiple infarcts were present in an organ some suppurated and others did not. Doubtless the explanation of this lack of suppuration lies chiefly in the low virulence of the infecting organisms, but it may be due in part to the very small number of organisms present in some emboli and in part to individual peculiarities of tissue resistance. Letulle's suggestion that we should speak of pyogenic individuals rather than pyogenic organisms, while perhaps an exaggeration, contains at least some elements of truth."

Thayer⁵ mentions "the striking rarity of pericarditis in streptococcal endocarditis, a point of considerable diagnostic significance. In the subacute series, pericarditis was observed in but 5.8 per cent." In contrast to this figure he mentions acute fibrinous pericarditis occurring in 60 per cent of the cases of acute rheumatic fever.

Ophüls,⁴ in a study of forty-seven cases of subacute ulcerative endocarditis, found acute pericarditis in nine cases; it was suppurative in five and fibrinous in four cases. It is assumed that this writer refers to the subacute bacterial group.

De la Chapelle and Graef² describe a case,

the findings of which closely resemble those in the case which we have described. Their patient developed paroxysmal flutter during the active stage of subacute bacterial endocarditis, persistent and almost uncontrollable epistaxis, and finally diffuse glomerulonephritis, with absolute renal insufficiency causing death from uremia, and in association with acute serofibrinous pericarditis as a terminal event. The authors can find no proof in this case that the pericarditis was caused by the streptococcus viridans, nor can they deny that it might have been. They state that acute pericarditis is so rare in this form of endocarditis that its association with uremia seems to point to the latter as the more logical cause.

In this case they mention the occurrence of a fresh patchy lobular pneumonia and mention the possibility that the pericarditis might be related to the chest complication. This, however, they consider to be remote. They prefer to believe that the pericarditis described in this case was on a uremic basis.

Summary

1. A case is presented of subacute bacterial endocarditis, complicated by pericarditis with effusion.

2. Comment is made as to the possible etiology of pericarditis in subacute bacterial endocarditis.

3. The rarity of purulent complications in subacute bacterial endocarditis is stressed.

My thanks for valued suggestions in the preparation of this paper are expressed to Dr. E. Libman of New York City, Drs. Flinn P. Morse and Osborne A. Brines of Detroit.

510 Kresge Building.

References

1. Blumer, G.: Subacute bacterial endocarditis. *Medicine*, 2:105-170, 1923 (pages 111, 114 and 116).
2. De la Chapelle, C. E., and Graef, I.: Two unusual cases of subacute bacterial endocarditis. *Med. Clin. North America*, 14:1335-1358, 1931.
3. Libman, E.: Characterization of various forms of endocarditis. *Jour. A. M. A.*, 80:813-818, 1923 (page 815).
4. Ophüls, W.: Statistical Survey of 3,000 Autopsies. *Stanford Univ. Press*, 1926 (pages 198 and 209).
5. Thayer, W. S.: Bacterial or infective endocarditis. *Edinburgh Med. Jour.*, 38:237-265; 307-334, 1931.

A PRESENTATION OF CASES OF PANCREATITIS*

EDGAR C. LONG, M.D., M.S.†

DETROIT, MICHIGAN

The subject of pancreatitis is receiving more and more consideration in the literature. We are presenting seventy-one cases of pancreatitis which were admitted to Detroit Receiving Hospital, Detroit, Michigan, in the past nine years.

As shown in Table I, there were thirty-one cases of acute and forty cases of chronic pancreatitis. The clinical diagnosis of pancreatitis (either acute or chronic) was not accepted unless the diagnosis was verified on the operating room or post mortem room table.

Table II shows the race and sex distribution of the cases of acute pancreatitis. Sixty-one per cent of the cases occurred in males. This figure is at variance with the sex distribution of most of the series of pancreatitis cases that have been so far presented. In other series pancreatitis has had a greater incidence in females.

TABLE I. CASES STUDIED

Total cases of acute pancreatitis studied.....	31
Total cases of chronic pancreatitis studied.....	40
Total cases studied.....	71

*From the Surgery Service of the Detroit Receiving Hospital.

†Dr. Long is a graduate of Wayne University College of Medicine (1930). He was an interne at the Detroit Receiving Hospital (1930-31) and served as Resident in Pathology (1931-32), and Resident in Surgery (1932-35) at the Detroit Receiving Hospital. He received the degree of Master of Science in Surgery from Wayne University in 1935. He is now Junior Attending Surgeon at Mercy Hospital, Monroe, Michigan.

Sixty-four per cent of the patients were in the fourth and fifth decades (Table III).

TABLE II. RACE AND SEX DISTRIBUTION OF CASES OF ACUTE PANCREATITIS

	No. cases	Per cent
White male	17	54.8
White female	10	32.2
Negro male	2	6.4
Negro female	2	6.4

TABLE III. AGE DISTRIBUTION OF CASES OF ACUTE PANCREATITIS

Age	No. cases	Per cent
20 to 29 years.....	3	9.6
30 to 39 years.....	10	32.2
40 to 49 years.....	10	32.2
50 to 59 years.....	2	6.4
60 to 69 years.....	5	16.1
70 to 79 years.....	1	3.2

This age incidence follows very closely the age incidence of gall-bladder disease. The youngest case was that of a twenty-four year old negress, while the oldest was a seventy-seven year old white man.

TABLE IV. CHIEF COMPLAINT AS GIVEN IN THIRTY-ONE CASES OF ACUTE PANCREATITIS

Epigastric pain	18 cases
Coma	4 cases
Upper right quadrant pain.....	2 cases
Abdominal pain (generalized).....	2 cases
Umbilical pain.....	2 cases
Nausea and vomiting	1 case
Hiccough	1 case
Not obtainable	1 case

TABLE V. ASSOCIATED COMPLAINTS AS GIVEN IN THIRTY-ONE CASES OF ACUTE PANCREATITIS

Nausea and vomiting.....	22 cases
Constipation	5 cases
Diabetes mellitus	3 cases
Jaundice	3 cases
Hiccough	3 cases
Idiosyncrasy to fried and fatty foods.....	4 cases
Indigestion	1 case
Eructations	1 case
Dyspnea	1 case
Chronic alcoholism	1 case

Epigastric pain was the chief complaint in the largest number of cases (Table IV), being found in eighteen of the thirty-one cases studied. The associated complaint of nausea and vomiting (Table V) was most predominant; however, constipation, idiosyncrasy to fried and fatty foods, diabetes mellitus, jaundice and hiccough were also noteworthy as associated complaints.

TABLE VI. DURATION OF SYMPTOMS IN THIRTY-ONE CASES OF ACUTE PANCREATITIS

12 hours or less.....	3 cases
13 to 24 hours.....	5 cases
25 to 48 hours.....	3 cases
48 hours to 1 week.....	7 cases
1 week to 1 month.....	2 cases
Several months	4 cases
Several years	2 cases
Not obtainable	5 cases

The duration of symptoms (Table VI) varied widely in this series from a few hours to several years. In the cases in which the symptoms had lasted for more than forty-eight hours the onset of the acute illness had been so gradual as to escape the notice of the patients.

The physical findings of abdominal tenderness (either epigastric or generalized)

and abdominal distension were most important (Table VII), although shock and jaundice were occasionally found.

TABLE VII. PHYSICAL FINDINGS IN THIRTY-ONE CASES OF ACUTE PANCREATITIS

Tenderness and rigidity in epigastrium.....	9 cases
Abdominal tenderness (generalized).....	7 cases
Abdominal distension (slight).....	6 cases
Abdominal distension (marked).....	5 cases
Tenderness and rigidity in epigastrium and right hypochondrium	4 cases
Shock	4 cases
Kussmaul breathing	4 cases
Icterus	3 cases
Tenderness in right hypochondrium.....	2 cases
Tenderness in right and left hypochondrium	1 case
Tenderness in epigastrium and left hypochondrium	1 case

TABLE VIII. LABORATORY FINDINGS IN ACUTE PANCREATITIS

A. White blood counts (23 cases)	
4,000 to 10,000 w.b.c.....	7 cases
10,000 to 15,000 w.b.c.....	9 cases
15,000 to 20,000 w.b.c.....	3 cases
20,000 to 30,000 w.b.c.....	3 cases
Over 30,000 w.b.c.....	1 case
B. Urinalyses (19 reported cases)	
Dextrose 3 plus to 4 plus.....	7 cases
Albumin plus to 3 plus.....	11 cases
Negative urine	3 cases
C. Blood dextrose (11 reported cases)	
80 to 120 mgm.....	4 cases
120 to 200 mgm.....	1 case
200 to 300 mgm.....	2 cases
300 to 400 mgm.....	1 case
400 to 500 mgm.....	1 case
500 to 600 mgm.....	2 cases
D. Non-protein nitrogen determination in four cases	
20 to 30 mgm.....	1 case
30 to 40 mgm.....	2 cases
70 to 80 mgm.....	1 case
E. Icterus indices (reported in six cases)	
5 to 15.....	1 case
15 to 30.....	2 cases
30 to 45.....	2 cases
45 to 60.....	1 case
F. Serology (reported in 19 cases)	
Positive	2 cases
Negative	17 cases

No reports were available in this series of the results of recommended tests for pancreatic damage such as the Cambridge, Wohlgemuth and Loewis tests. However, of the routine laboratory examinations (Table VIII), 69 per cent of the reported cases showed a definite leukocytosis. Thirty-six per cent of the urinalyses revealed the presence of dextrose, and albumin was present in 57 per cent. Of the eleven blood sugar determinations reported, 63 per cent showed elevation. Serology was positive in 10 per cent of the cases.

Fat necrosis was present at operation in 66 per cent of the operated cases (Table X). Enlargement of the pancreas was noted in 46 per cent and the presence of gallstones in 46 per cent.

TABLE IX. CLINICAL DIAGNOSIS IN CASES OF ACUTE PANCREATITIS

Acute pancreatitis	8 cases
Cholecystitis and cholelithiasis.....	7 cases
Perforated peptic ulcer.....	4 cases
Diabetic coma	4 cases
Acute intestinal obstruction.....	2 cases
Alcoholic gastritis	2 cases
Peritonitis	2 cases
Gastroenteritis	2 cases
Portal cirrhosis	1 case

TABLE X. OPERATIVE FINDINGS IN FIFTEEN CASES OF ACUTE PANCREATITIS

	No. cases	Per cent
Fat necrosis	10	66.6
Pancreas enlarged	7	46.6
Gallstones present	7	46.6
Sanguinous fluid present.....	3	20.0
Retroperitoneal hemorrhage	2	13.3
Gastric ulcer	1	6.6

The operative procedure of choice was cholecystostomy and drainage of the abdomen (Table XI). All the operative procedures resulted in a high mortality.

TABLE XI. OPERATIVE PROCEDURE AND RESULT IN ACUTE PANCREATITIS

	Cases	Im-proved	Died	Mortality Per cent
Cholecystostomy and drainage of abdomen	6	1	5	83.3
Drainage of abdomen.	3	0	3	100.0
Incision and drainage of pancreas	2	1	1	50.0
Cholecystectomy and drainage of abdomen	2	1	1	50.0
Cholecystostomy and incision and drainage of pancreas.....	1	0	1	100.0
Jejunostomy	1	0	1	100.0
Total	15	3	12	80.0

TABLE XII. ASSOCIATED PATHOLOGY IN ACUTE PANCREATITIS

Gallstones	8 cases
Chronic interstitial pancreatitis.....	6 cases
Chronic cholecystitis without cholelithiasis	3 cases
Diabetes	3 cases
Annular pancreas with chronic interstitial pancreatitis†	1 case
Ampulla of Vater surrounded by edema...	1 case
Ruptured gastric ulcer.....	1 case
Ruptured duodenal ulcer.....	1 case
Thrombosis of pancreatic vein.....	1 case
Appendiceal abscess	1 case
No associated pathology	8 cases

†Case reported by Dr. Osborne A. Brines, Ann. Surg., 92:241, (Aug.) 1930.

Gall-bladder disease was the most common associated pathology in the thirty-one cases (Table XII). Evidence of previously existing chronic interstitial pancreatitis was seen in six of the cases. However, there were eight cases in which no associated pathology could be found.

TABLE XIII. PATHOLOGICAL CLASSIFICATION OF CASES OF ACUTE PANCREATITIS

Acute hemorrhagic pancreatitis.....	15 cases
Acute pancreatitis	7 cases
Acute suppurative pancreatitis.....	5 cases
Acute pancreatic necrosis.....	3 cases
Abscesses in pancreas.....	1 case

TABLE XIV. MORTALITY IN ACUTE PANCREATITIS

(1) Total mortality	90.3%
Expired: 28 cases	
Improved: 3 cases	
(2) Mortality in 15 operated cases.....	80.0%
Expired: 12 cases	
Improved: 3 cases	
(3) Mortality in 16 unoperated cases.....	100.0%

The mortality of 90.3 per cent (Table XIV) is inexplicably high. The mortality (80.0 per cent) of the fifteen operated cases is only relieved by comparison with the 100 per cent mortality of the sixteen unoperated cases.

TABLE XV. SEX DISTRIBUTION OF CHRONIC PANCREATITIS

Male	23 cases	56.5%
Female	17 cases	42.5%

TABLE XVI. AGE DISTRIBUTION OF CHRONIC PANCREATITIS

Age	No. cases
12 days	1
16 years	2
20 to 29 years.....	9
30 to 39 years.....	4
40 to 49 years.....	9
50 to 59 years.....	9
60 to 69 years.....	6

TABLE XVII. CHIEF COMPLAINTS IN CASES OF CHRONIC PANCREATITIS

Epigastric pain	10 cases
Abdominal pain (generalized).....	4 cases
Dyspnea	4 cases
Coma	3 cases
Chest pain	2 cases
Nausea and vomiting.....	2 cases
Weakness	2 cases
Cough	2 cases
Epigastric pain referred to back.....	1 case
Sore mouth	1 case
Pain in upper right quadrant.....	1 case
Paralysis of both legs.....	1 case
Loss of weight.....	1 case
Lower abdominal pain.....	1 case
Diarrhea	1 case
Constipation	1 case
Bleeding from all body orifices.....	1 case

Of the forty cases of chronic pancreatitis, twenty-three occurred in males (Table XV). The age distribution varied within much wider limits than acute pancreatitis (Table XVI). The youngest case was that of luetic pancreatitis occurring in a congenital luetic twelve days old.

Epigastric pain (Table XVII) was the chief complaint in chronic pancreatitis as it was in acute pancreatitis. Tenderness in the epigastrium or upper right quadrant, along with abdominal distension, jaundice and liver enlargement were the most prominent physical findings (Table XVIII).

TABLE XVIII. PHYSICAL FINDINGS IN CASES OF CHRONIC PANCREATITIS

Moderate abdominal distension.....	7 cases
Epigastric tenderness	6 cases
Liver enlarged	6 cases
Jaundice	6 cases
Tenderness in upper right quadrant.....	5 cases
Generalized abdominal pain.....	4 cases
Ascites	2 cases
Tenderness in upper right and upper left quadrant	1 case
Tenderness in upper right quadrant referred to epigastrium.....	1 case
Tenderness in upper left quadrant.....	1 case
No abdominal findings.....	13 cases

TABLE XIX. LABORATORY FINDINGS IN CHRONIC PANCREATITIS

A. White blood count (thirty-one cases reported)		
Under 10,000 w.b.c.....	11 cases	
10,000 to 15,000 w.b.c.....	9 cases	
15,000 to 20,000 w.b.c.....	8 cases	
20,000 to 25,000 w.b.c.....	0 cases	
25,000 to 30,000 w.b.c.....	3 cases	
B. Urinalyses (twenty-four cases reported)		
Albumin—1 plus to 4 plus.....	18 cases	
Albumin—negative	6 cases	
Dextrose—1 plus to 4 plus.....	6 cases	
Dextrose—negative	18 cases	
C. Blood dextrose (ten cases reported)		
8 to 120 mgm.....	4 cases	
120 to 200 mgm.....	1 case	
200 to 300 mgm.....	1 case	
300 to 400 mgm.....	2 cases	
400 to 500 mgm.....	2 cases	
D. Non-protein nitrogen determination (five cases)		
20 to 30 mgm.....	2 cases	
30 to 40 mgm.....	2 cases	
40 to 80 mgm.....	1 case	
E. Icterus index (five cases reported)		
5 to 15.....	1 case	
15 to 30.....	1 case	
30 to 45.....	1 case	
45 to 60.....	1 case	
150	1 case	
F. Serology (twenty-six cases reported)		
Positive	6 cases	23.0%
Negative	20 cases	77.0%

The routine laboratory findings showed a definite leukocytosis in 64 per cent of cases (Table XIX). Seventy-five per cent of urinalyses revealed the presence of albu-

min while 25 per cent showed dextrose present. Blood dextrose determinations were made in ten cases showing elevation above normal in 60 per cent. In twenty-six cases, serology was positive in 23 per cent.

Eleven patients having chronic pancreatitis were operated upon (Table XX). Enlargement of the pancreas was noted in six cases and chronic cholecystitis in four.

TABLE XX. OPERATIVE FINDINGS IN ELEVEN CASES OF CHRONIC PANCREATITIS

Pancreas enlarged	6 cases
Chronic cholecystitis	4 cases
Fat necrosis	3 cases
Chronic duodenal ulcer.....	1 case
Chronic pyloric ulcer.....	1 case
Sanguinous fluid in abdomen.....	1 case

TABLE XXI. OPERATIVE PROCEDURE AND RESULTS IN CHRONIC PANCREATITIS

	Cases	Im- proved	Died	Mortality Per cent
Drainage of abdomen	3	1	2	66.6
Abdomen closed with- out drainage.....	3	2	1	33.3
Posterior gastro- jejunostomy	2	0	2	100.0
Cholecystectomy	1	1	0	0.0
Choledochostomy	1	0	1	100.0
Cholecystectomy and choledochostomy ...	1	1	0	0.0
Total	11	5	6	54.5

TABLE XX. ASSOCIATED PATHOLOGY IN CHRONIC PANCREATITIS CASES

Chronic cholecystitis	9 cases
Generalized tuberculosis	8 cases
Interstitial hepatitis.....	7 cases
Diabetes mellitus	5 cases
Hypertensive heart	2 cases
Acute ulcerative typhlitis.....	1 case
Gangrenous stomatitis	1 case
Chronic duodenal ulcer.....	1 case
Chronic gastric ulcer.....	1 case
Chronic pyloric ulcer.....	1 case
Chronic duodenitis	1 case
Obstruction to pancreatic duct.....	1 case
Portal cirrhosis	1 case
Luetic aortitis	1 case
Gangrene of foot.....	1 case
No associated pathology.....	3 cases

TABLE XXIII. PATHOLOGICAL CLASSIFICATION OF CHRONIC PANCREATITIS

Chronic interstitial pancreatitis.....	31 cases
Chronic tuberculous pancreatitis.....	7 cases
Chronic luetic pancreatitis.....	2 cases
Total	40 cases

In Table XXII it is interesting to note that chronic cholecystitis was the most common associated pathology. Peptic ulceration or inflammation was found in four cases or 10 per cent.

ACHLORHYDRIA: ITS CLINICAL SIGNIFICANCE AND MANAGEMENT

C. EMERSON VREELAND, M.D.†
DETROIT, MICHIGAN

The term "achlorhydria" is not synonymous with and should not be used as a substitute for the term "achylia gastrica." Achlorhydria means the absence of free hydrochloric acid, with decreased gastric secretion, but with the ferments, pepsin and rennin retained. Achlorhydria occupies the mid-stage between hypochlorhydria and true achylia gastrica. Both gastric ferments, free hydrochloric acid, and some intrinsic factor as yet not fully analyzed are lost in achylia. Thus we find true achylia representing the extreme end stage of gastric secretory depression.

There are two very distinct viewpoints regarding achlorhydria. First, that it represents an extreme depressive functional variation of the secretory activity of the stomach. Second, that it is a distinct pathological entity, in which an organic atrophy of the mucous membrane of the stomach is the outstanding feature.

Hanfield Jones²¹ first described "Atrophy of the Gastric Mucosa," in 1854. Fenwick¹⁵ pointed out the relationship of gastric atrophy to pernicious anemia in 1880. Ewald,¹⁷ in 1886, by the use of his test meal first noted the absence of gastric acidity and ferments, and demonstrated atrophy and chronic inflammation of the mucous membrane in an autopsied case. Rehfuß,³⁰ in 1915, by the method of fractional test meals, showed that there were true and false achylia.

Many clinicians have found cases of achlorhydria which have returned to normal secretion after a few months or a year, while Einhorn¹⁰ reports one case returning to normal after five years.

The importance of achlorhydria is shown by its frequency. Hurst¹⁹ showed in a series of 325 consecutive fractional test meals that complete achlorhydria was present in 10.5 per cent. Eggleston⁹ found 276 cases (10 per cent) of achlorhydria, among which 1.2 per cent were true achylia. Bennett and Ryle³ found achylia in 4 per cent of young adults.

Achlorhydria occurs with equal frequency in both sexes.

There is often a striking familial incidence. I have records of achlorhydria oc-

curing in two and three generations. Martius²⁶ found the condition in three children of a patient who died of Addison's anemia. Weinberg³⁵ examined the children of twelve patients suffering from pernicious anemia and achylia and found that nine of the aggregated twenty-two children had achylia.

The age incidence of fifty-six cases, compiled by Faber and Lange,¹³ is of clinical significance.

Age—years	No. cases
1-20.....	2
20-30.....	2
30-40.....	7
40-50.....	11*
50-60.....	19*
60-70.....	11*
70-80.....	4
Total.....	56

True achlorhydria is usually classified as simple or secondary. The simple type is thought to be of congenital origin, and the secondary type is supposed to be secondary to or associated with chronic debilitating diseases. In all truthfulness, the causes of all types of achlorhydria are certainly not known, which accounts for so many theories regarding it.

The simple type is said, by most writers, to be secondary to the depressive neuroses and neurasthenia, but since fractional gastric analyses were not made routinely before onset of nervous depressions, the achlorhydria may have preceded the nervous involvement or accompanied such symptoms, with some primary etiology as the cause of both. Much evidence will be presented later in support of the theory that the latter supposition may be correct. It is already a known fact that many cases of achlorhydria and achylia have been diagnosed

†Dr. Vreeland graduated from the University of Michigan, obtaining his B.S. degree. He graduated from Rush Medical School, Chicago, in 1911. He was instructor in Medicine, University of Chicago, 1913-1915. He has been Chief of the Gastro-Intestinal Department of Medicine, Grace Hospital, Detroit, since 1916. He has lectured for several years in the Department of Post-Graduate Medicine, University of Michigan.

*About 80 per cent were between forty and seventy years.

years in advance of the onset of the typical blood picture of pernicious anemia, and in advance of later developing chronic cholecystitis.

Consider now the secondary type of achlorhydria and with what diseases it is commonly associated. First there are the definite organic diseases of the stomach itself; gastric carcinoma, gastritis, gastric syphilis, and tuberculosis, and subtotal gastrectomy.

Next there is the group of chronic debilitating diseases associated with achlorhydria, the causes of which are often vague or mixed, such as toxic, metabolic, chronic infections, mineral deficiencies or ductless gland deficiency or imbalance. This group of diseases are nephritis, diabetes, pernicious anemia, pulmonary and visceral tuberculosis, alcoholism, hypothyroidism, chronic arthritis, epilepsy, and parathyroid disease.

Carlson and Keeton⁵ found after experimental parathyroidectomy that the quantity of gastric juice was lessened or entirely suppressed. They injected calcium salts, which caused a return of gastric secretion. Crohn⁸ states that the adrenal glands play a rôle in achlorhydria which, today, is little understood. Permin²⁹ found achylia in 75 per cent of cases of pulmonary tuberculosis. In chronic nephritis, Krakow²² found an incidence of 30 per cent. Faber and Lange found 25 per cent of achylia in diabetes. I believe my records will show fully 25 per cent in cases of hypothyroidism with obesity, while the number of cases of achlorhydria among patients with the symptom-triad of obesity, hypothyroidism, and sacroiliac tenderness is very great. Felsen¹⁴ found complete absence of free acid in 5 per cent of epileptics examined.

The third group of diseases associated with achlorhydria might be classed as the infections group, with or without a nutritional and mineral deficiency or imbalance. Chief among these conditions are chronic cholecystitis, chronic intestinal infections and parasitic cases, dibothriocephaluslatus, sprue and pellagra.

Jacobson²⁰ found achlorhydria in thirteen out of thirty cases among children with chronic intestinal infections. Bastedo² reports two patients having sprue with achylia, who died, both showing typical blood pictures of pernicious anemia. Faber¹² believes that intestinal bacterial infections and toxins play

an important rôle in the production of achlorhydria and achylia, an inherited predisposition supplying a constitutional substrate for its development.

The regular occurrence of achlorhydria, followed soon by a complete achylia in cases in which partial gastrectomy has been performed for ulcer, and in which the whole acid-bearing fundus and body of the stomach remain intact, is the most recent and probably the best evidence that achylia results not from organic changes in the mucosa but from an interference with the functional nervous control of gastric secretion. This achlorhydria occurs immediately after the operation, providing the antrum and particularly if the incisura angularis has been resected; it occurs before a chronic gastritis has had sufficient time to become established. These cases present the spectacle of normal acid-producing cells in the surviving portion of the stomach and yet an achylia both of acid and of ferments; it offers a final refutation to the argument of the pathologists that all cases of achylia result from and follow chronic atrophic gastritis.

Now that we have a fairly complete list of the diseases accompanying or preceded by achlorhydria, let me point out as many factors as are known common to most of them. In this way, the true clinical significance of the condition should be made more apparent.

Hypercholesteremia occurs regularly in cases of diabetes and, following the experimental removal of the pancreas, Gray and Rabinowitsch¹⁷ suggest that the degree of cholesteremia is a more satisfactory index of the severity of the diabetic condition than is any one of the other factors. The administration of insulin is rapidly followed by a drop in plasma cholesterol.

Lipemia is commonly observed in all types of chronic nephritis. Hypercholesteremia is a constant manifestation in lipoid nephrosis (Epstein's). Blood cholesterol of 700 to 900 mg. per 100 c.c. are common and as high as 2200 mg. have been noted, whereas normal blood cholesterol ranges from 140 to 200 mg. per 100 c.c.

In most cases of hepatogenous jaundice, both obstructive and non-obstructive, the blood cholesterol is abnormally high. It occurs in cholecystitis, catarrhal jaundice and acute hepatitis.

Moderate increased blood cholesterol occurs regularly during the course of normal pregnancy, reaching a maximum at term. Clinically, the onset of gall-bladder symptoms and sacro-iliac distress frequently follows pregnancy.

Hypothyroidism is rather constantly associated with an increase in blood lipoids, the degree of hypercholesteremia being roughly proportional to the diminution in the basal metabolic rate. A return to normal usually follows the administration of thyroid extract. Clinically again we see associated hypothyroidism, obesity, sacro-iliac joint involvement and lowered blood pressure. Hypothyroidism also appears in several members of a family, and through several generations, as does achlorhydria. Note that plasma cholesterol in hypothyroidism is reduced by thyroid gland substance, while in diabetes it is reduced by insulin. Then, remember, that originally the hypothyroidism was due to iodine deficiency during the growth period, or it began *in utero* from the maternal iodine deficiency.

Xanthomas, commonly associated with diabetes, nephritis, jaundice, and chronic cholecystitis, constantly show high blood cholesterol. All of these conditions are commonly achylic. Pellagra, another disease showing a high incidence of achlorhydria, produces skin lesions, too, and its cause is food deficiency or imbalance plus some low grade infection.

Strange to say, the plasma cholesterol is uniformly low in pernicious anemia, and this is also true of grave secondary anemias. The explanation of this is thought to be dependent upon some abnormality of reticulo-endothelial function.

Blood calcium and phosphate disturbances are frequently seen among the diseases accompanied by achlorhydria. The outstanding physiologic effect of the administration of active extracts of the parathyroid glands is an increase in the calcium concentration of the blood serum. Because of the fact that calcium exists in the body chiefly in the form of calcium phosphate it is obvious that either one of these elements cannot be significantly affected without simultaneously involving some change in the other. Collip believes that the physiologic action of the parathyroid hormone is to regulate calcium metabolism and to maintain it at a definite level, even at the expense of the bones if

necessary. The production of this characteristic effect is dependent upon the presence of an adequate supply of vitamin D, in the absence of which the injection of the parathyroid hormone may fail to produce an increase in the serum calcium concentration. Normal blood calcium ranges from 9 to 11 mg. per 100 c.c. and blood phosphate ranges from 3 to 4.5 mg. per 100 c.c.

Hypocalcemia is present most frequently in the following diseases and conditions: hypoparathyroidism, celiac disease, sprue, nephrosis, nephritis, osteomalacia, vitamin D deficiency, pregnancy and alkalosis.

Apparently many cases of achlorhydria are associated with diseases which are related closely to vitamin deficiency, deficiencies of calcium, phosphorus, and iodine metabolism, and the faulty metabolism of cholesterol. The physiological effect of insulin and thyroid gland extract on cholesterol metabolism is shown also, and probably the over-balancing of too much fat and carbohydrate to the proportion of proteins, minerals, vitamins, raw fruits and vegetables, and whole grains may aid in producing lipemia.

Studies of the average American dietary have shown that the content of the food in minerals often falls far below the calculated optimum and sometimes below the minimum. A striking example of this is the failure of many dietaries to furnish sufficient calcium and phosphorus. The several mineral elements are not interchangeable. Each has its own place in metabolism and substitution is not possible. The most beneficent effect is exerted by calcium. A synergistic influence of calcium is exhibited toward iron; for with an abundant intake of calcium, the organism can maintain equilibrium on an appreciably small supply of iron. Calcium is able to correct inorganic imbalance in either direction, and it nullifies the deleterious influence of sodium, potassium or magnesium. Just as calcium regulates an equilibrium with iron, Hart and Steenbock¹⁸ found that rats suffering from nutritional anemia can utilize iron for building hemoglobin only when this element is supplemented by minute amounts of copper. Then Myers and Beard²⁸ observed that not only copper but several other metals as well, manganese, nickel, and arsenic, each have a supplementary effect on hemoglobin regeneration.

Sherman³² studied 150 American dietaries and calculated from them 14 to 20 mg. of iron intake daily—just the minimum requirement.

Sherman also found the minimum calcium daily requirement to be 1 to 1.5 grams, and that many dietaries do not contain that amount. Under ideal conditions, growing children are said to require from three to four times as much calcium per kilogram of body weight as is required for men. Calcium is concerned with the physiology of nerve conduction and stability, and probably in energy exchange of muscle contraction. Since the cases of achlorhydria simplex are mostly seen in the depressive neurosis and nervous instability, an inadequate supply of, or inability to assimilate enough calcium could easily be one of the fundamental causes. Phosphorus was found to be deficient more commonly than calcium, and works in combination with calcium. Furthermore, gastric parietal cells are credited with the ability of causing a chemical reaction between the dehydric sodium phosphate of the blood and the sodium chloride of the mucosa, freeing hydrochloric acid in the stomach. The average amount of free hydrochloric acid secreted daily is about 1500 c.c. Certainly any lack of phosphorus supply or metabolic failure of utilization of phosphorus would have a profound influence regarding achlorhydria. Phosphorus is found in organic union with proteins, fats and carbohydrates. It aids in the work of all glands and particularly in the mammary and sexual glands.

McCullum²⁴ makes the broad statement that faulty diets do not often produce sudden and graphic consequences; the results are slow, insidious and difficult to recognize. Dietary deficiencies are usually multiple, and the resulting clinical picture is correspondingly obscure.

McCarrison²³ attributes the great amount of digestive disease experienced by civilized people to their refined diets. He tells of the magnificent physique, the robust health, the long preservation of youth and nervous stability seen among tribes in the Himalayas, which he credits to their diet of milk, eggs, whole grains, and raw fruits and vegetables; he saw no appendicitis, peptic ulcer or nervous digestive disorders among these people. The vague but insistent digestive complaints of gastro-intestinal invalids may

be the expression in a milder tone of the same nutritional faults which, in beriberi and sprue, lead to loss of intestinal neuromuscular control and assimilative powers and to other distressing symptoms of disease. The failure of good nutrition leads to instability of the nervous system and emotional imbalance.

Resistance to infection is definitely related to good nutrition. McLester²⁵ observes that children from parents suffering from malnutrition are deficient mentally and physically, and that this may be carried through a few generations, until they even fail to perpetuate themselves. Luther Burbank, in his monographic work on heredity, states the same thing and projects the idea far beyond the first generation into the environment of centuries. He says:

"There are really, after all, only two main influences which we need to direct, in order to change and control the characteristics of any individual thing. The first of these is environment. Rains, snows, fogs, droughts, heat, cold, wind, soil, food, shade, sun, light, air, animal, plant, or human neighbors and a thousand other factors are the elements of environment—some pulling one way and some pulling another, but each with its definite, though sometimes hardly noticeable, influence on the individual. The second influence is heredity, which is the sum total of all of the environments of a complex ancestry, back to the beginning." David Starr Jordan of Stanford University supported Burbank's belief when he said, "A knowledge of Mendelism is recognized as only the A B C to the broader knowledge of heredity necessary for success in animal and plant improvement, and all variations and all mutations of every nature are responses to environment which, by repetition and combination, are slowly but surely fixed in heredity and at last made tangible either by nature or that part of nature called man."

So many observers have noted the familial or hereditary tendency of achlorhydria as well as the same tendency in families suffering from the diseases associated with achlorhydria, viz., pernicious anemia, diabetes, nephritis, gall-bladder disease, hypothyroidism, etc., that I wish to emphasize that heredity is only the sum total of generations of ancestral environment, and, as related to achlorhydria, this environment of the past probably multiplied many factors of mineral, vitamin, and food deficiencies or imbalance, together with overeating, underexercising, nervous strain, and many other things.

There are many common factors associating the diseases, pellagra, sprue, and pernicious anemia. We are chiefly concerned with the achlorhydria. But in addition they

usually show the sore mouth, red tongue, and diarrhea. Other gastro-intestinal symptoms are present. Pellagra and pernicious anemia present marked nervous and cord symptoms at times, while sprue and pernicious anemia give a similar grave blood picture. Note particularly that some deficiency factor is thought to be present in all three conditions.

In pellagra, three views have been expressed: first, that it is of an infectious nature; second, that it is a deficiency disease; third, that an infection attacks people who have a general malnutrition and a specific form of nutritional failure. Goldberger¹⁶ finds the specific deficiency to be the heat-resistant fraction of vitamin "B," now called vitamin "G." He prevented recurrences of the disease by liberal feeding of milk, eggs, and meat. Later refinements to the curative diet have been raw vegetables and fruits, liver substance and yeast.

Sprue has frequently been confused with pellagra, and E. J. Wood³⁶ suggests that it is identical with pernicious anemia. Ashford¹ believes the *Monilia* infection becomes pathogenic only when there has been a preceding digestive deficiency. Milk is the outstanding food to correct the diet deficiency, but liver and liver extract are greatly beneficial. Raw fruits are beneficial, and especially strawberries. In common with some of the achlorhydria diseases showing increased blood cholesterol, the sprue diet shows best results when the fats and carbohydrates of the diet are reduced. Thomas Brown⁴ has shown that achlorhydria of sprue is frequently accompanied by a decrease or loss of the pancreatic ferments.

Castle⁶ discovered that beef protein, which had been digested in the normal stomach and then regurgitated, can then be fed to the pernicious anemia patient with the same striking benefit that accompanies liver feeding, and, associating this with the unfailing achlorhydria of this disease, he has evolved an attractive theory. He assumes that pernicious anemia is a deficiency disease due to the lack of two substances, an intrinsic and an extrinsic factor. The former is present in the stomach of the normal person but is missing from the stomach of the patient with pernicious anemia; it is distinct from pepsin and hydrochloric acid, and is not to be found in the saliva or the duodenal contents. This substance in the normal

process of digestion produces from the food (beef muscle especially) some split-product which is essential to health. This product is the extrinsic factor. It is lacking in pernicious anemia because the source of its production, the intrinsic factor, is missing from the patient's stomach. The achlorhydria or achylia would appear, then, to be merely the accompaniment of some more ultimate gastric defect which in itself is the cause of the disease. Following Castle's work, Sturgis and Isaacs³⁴ experimented with dried defatted extract of whole hog stomach and found that daily feedings of 15 gm. to 30 gm. produced active and prompt response in the treatment of 39 pernicious anemia patients. This substance is called ventriculin.

Recently, Morris²⁷ and his co-workers have been able to concentrate a fraction from the gastric juice of men, swine, and dogs, which, when injected intramuscularly, produces prompt remissions in pernicious anemia. Richter, Joy, and Kim³¹ have demonstrated the absence of the "specific" anti-anemic substance in the liver of a patient suffering from pernicious anemia.

Shiff and Tahl³² showed marked improvement in the diarrhea and gastro-intestinal symptoms of pernicious anemia patients by the use of desiccated hog's stomach, but could not induce a return to normal gastric acidity by its use. Colonic peristalsis was stimulated. The hog's stomach extract was tried in cases of achlorhydria accompanying intestinal infections, chronic cholecystitis, and tuberculosis with marked clinical improvement in the gastro-intestinal symptoms and diarrhea, but again failed to restore the stomach acids to normal.

Explanation of the causes of achlorhydria and why it is associated with so many different groups of diseases could be made in several different ways. The preceding data bring together practically all that is definitely known about it at the present time, yet the near future may bring an immediate clear solution to the whole problem. Until such a solution is finally made, it would seem most logical to assume the following: Achlorhydria occurring with gastritis, carcinoma, syphilis, and tuberculosis of the stomach is the direct result of chronic inflammation and atrophy of the gastric mucosa. When it occurs with nervous instability and emotional imbalance, it may be

temporary or permanent, but both the achlorhydria and the nervous depression are due to a general nutritional deficiency or imbalance, either mineral, vitamin, or protein, any of which may affect the ductless glands.

In the more chronic group of associated diseases, the lowered resistance has become more marked because achlorhydria appears more frequently in older individuals, and because they may represent several generations of inherited mineral or other deficiencies. Such lowered resistance permits the invasion of various infections, which vary with different climates and races of people. The group of achlorhydrias among the diseases with high cholesterol in the blood plasma probably have the same nutritional deficiency background, with subsequent chronic infection, but in addition probably over-eat foods rich in fats and starches, and at the same time under-exercise. The chief deficiencies in minerals are of calcium, phosphorus, iodine and iron, but to a lesser degree, copper, manganese, and sulphur. All of the vitamins may be deficient unless we make special effort to obtain an abundance of milk, eggs, liver, whole grain products, raw vegetables, fruits, and butter, and then supplement this during the winter months with cod liver oil, or the irradiated food products. We must get away from foods that are too refined.

Because of the great frequency of achlorhydria among so many groups of diseases, no chronic ailment or vague complaint should be dismissed without a gastric analysis. A good rule to follow is to give the one-hour Ewald or Boas test meal first. Then if free acid is absent or deficient, repeat the meal, but withdraw it fractionally by the Rehfuß method. If all the fractions show no free acid, I would not recommend the use of histamine routinely because of its frequent violent reaction. It would be preferable to repeat the fractional meal at a later date. The pepsin and rennet ferment tests are very simple to make, but will add little to the diagnosis, as achylia is simply the end-stage beyond achlorhydria.

When cases of achlorhydria are found, we should be stimulated to carefully search for all the diseases and conditions known to be associated with them, which will call for most exhaustive blood studies, urine tests, and metabolism estimation, as well as

physical and roentgenological examination. Then when one of the diseases commonly associated with achlorhydria is diagnosed, a gastric analysis should be made, and if anacidity is demonstrated, it should be treated as a definite deficiency of the intrinsic gastric factor, in addition to deficiency of hydrochloric acid. We should not neglect thorough inquiry regarding the optimum daily intake of all essential minerals, vitamins and proteins. Glandular deficiency, if present, should be corrected.

Prognosis in achlorhydria is said to be good, at least no evidence has been presented which shows that this physiological deficiency causes death or rapid failure of health. We could say the same thing about migraine, hypothyroidism, obesity, insomnia, and many other conditions, yet each or all may finally, though insidiously, contribute to some final fatal disease. If too many supports of the human structure are removed or weakened, the structure falls.

Inter-marriage of achlorhydric individuals presents the same problem as presented in migraine, hypertension, nephritis, pernicious anemia, and many other conditions appearing frequently in families over several generations. Biologically, such marriages should not be encouraged. In achlorhydria, other than that due to organic disease of the stomach, we should be able to cause a substantial decrease by marriage control, providing every individual involved received the optimum intake of balanced foods, vitamins, minerals, and the specific intrinsic gastric factor.

Management of achlorhydria consists, largely, in the careful search for all possible deficiencies, and correcting them. Dilute hydrochloric acid causes clinical improvement in most cases suffering from diarrhea and flatulence. Search for and remove all focal infections. According to the recent experiments of Shiff and Tahl, the intrinsic gastric deficiency should be supplied, at least periodically, if not regularly. Since the stomach emptying time is greatly increased in cases of anacidity, it is well to have all foods thoroughly masticated, and in cases of diarrhea use the well cooked, low residue diet.

When any country grows older, the soil becomes depleted of minerals and humus, which sustains swarms of soil bacteria.

Without plenty of soil fertilizers, the bacteria will not thrive, and then our vegetables, fruits, and grains will not contain enough minerals and vitamins unless bacteria transform soil minerals into the plants. The agricultural bulletins are constantly describing deficiency diseases in farm animals due to lack of various minerals in their grains and forage, because it was grown on soils deficient in these elements. I have letters from soil experts stating that excessive rainfall, erosion, and lack of money for yearly fertilization in the Southeastern states has greatly decreased the mineral quality of their vegetables and forage. And so it may come about that achlorhydria and all other deficiency conditions may be largely controlled by growing our vegetables, fruits, grains, and meat animals on farms that are supercharged with all the essential minerals, and swarming with the friendly bacteria that accomplish decomposition and nitrification.

References

1. Ashford, B. K.: Tice's, Practise of Medicine.
2. Bastedow, W. A.: Jour. Amer. Med. Assoc., 1923.
3. Bennett and Ryle: Therapie der Gegenwart, 1913.
4. Brown, Thos.: Internal Clinics, Series 37, 1927.
5. Carlson and Keeton: Amer. Jour. Phys., 1920.
6. Castle, W. B.: Amer. Jour. Med. Sci., 1930.
7. Collip: Trumper and Cantarow—Biochem. Int. Med., 1932.
8. Crohn, B. B.: Affections of the Stomach, 1927.
9. Eggleston, E. L.: Jour. Amer. Med. Assoc., 1924.
10. Einhorn, Max: Med. Record, 1894.
11. Ewald: Diseases of Stomach, 1886.
12. Faber, K.: Arch. Inter. Med., 1924.
13. Faber and Lange: Zeit. Klin. Med., 1908.
14. Felsen, J.: Arch. Inter. Med., 1924.
15. Fenwick: Atrophy of the Stomach, 1880.
16. Goldberger, Joseph: Public Health Report, 1926.
17. Gray and Rabinowitsch: Trumper and Cantarow—Biochem. Int. Med., 1932.
18. Hart and Steenbock: Jour. Biol. Chem., (May) 1928.
19. Hurst, A. F.: Medical Essays and Addresses, N. Y., 1924.
20. Jacobson, A. T. B.: Acta. Med. Scand., 1920.
21. Jones, Hanfield: Monographic Medicine Quot., 1916.
22. Krakow: Zeit. Klin. Med., 1910.
23. McCarrison, R.: Brit. Med. Jour., 1924.
24. McCollum, E. V.: The Newer Knowledge of Nutrition, New York: Macmillan, 1929.
25. McLester, James S.: Nutrit. and Diet in Health and Disease, 1931.
26. Martius, F. W. A.: Achylia Gastrica, Vienna, 1897.
27. Morris, et al: Jour. Amer. Med. Assoc., 1933.
28. Myers and Beard: Jour. Amer. Med. Assoc., (Oct. 19) 1929.
29. Permin, G. E.: Inter. Beit. a Path., 1910.
30. Richfuss, M. E.: Amer. Jour. Medical Science, 1915.
31. Richter, Joy, and Kim: Nutrit. and Diet in Health and Dis., 1931.
32. Shiff and Tahl: Amer. Jour. Dig. Dis. and Nutr., 1934.
33. Sherman, H. C.: Jour. Biol. Chem., 1924.
34. Sturgis and Isaacs: Amer. Jour. Med. Sci., 1930.
35. Weinberg, F.: Dent. Arch. Klin. Med., 1918.
36. Wood, E. J. Amer. Jour. Med. Sci., 1915.

Discussion

DR. ELMER L. EGGLESTON: This paper by Doctor Vreeland is very timely and should awaken our interest in many gastro-intestinal conditions which we observe from day to day and concerning which

we know so little. The complete absence of hydrochloric acid in the gastric juice had been observed for years without much being known as to its significance. We concluded it was of little importance as we had been taught that nature supplied the digestive ferments in duplicate or triplicate, little dreaming that there were ferments produced by the gastric mucosa of greatest importance in blood regeneration.

The antiseptic value of the hydrochloric acid is important and tends to protect the upper gastro-intestinal tract from the effects of bacterial invasion. As an activating agent of some of the gastric ferments it is most important. Its absence is practically always accompanied by a disturbed motility—a rapid emptying of the upper gastro-intestinal tract, the food passing through the small intestine and into the colon in an undigested state, where it is decomposed by the intestinal bacteria. There results a colon irritation and frequently diarrhea and a possible lack of nutrition to the patient. Not always do we note these symptoms but they are sufficiently frequent to warrant our attention and to suggest that possibly every patient exhibiting the complete absence of hydrochloric acid after the use of histamin should receive serious consideration.

The work of Castle, Minot and Murphy, on the relationship of the hematopoietic ferment to primary anemia and subacute spinal degeneration, should encourage more serious consideration relative to this gastro-intestinal disturbance which hitherto has been accepted as unfortunate but of no particular importance. When the atrophy of the gastric glands, resulting from a chronic gastritis, is so complete as to destroy the ferments and especially the hematopoietic ferment, it is not sufficient to prescribe hydrochloric acid only, but this specific ferment in the form of liver extract or ventriculin must be prescribed also. These ferments are rarely, if ever, absent unless the patient exhibits a complete and probably permanent achlorhydria. Hurst also suggests another X ferment which he termed "neuropoietin." This, he thinks, is not identical with hematopoietin as subacute combined degeneration of the spine is not always present in Addison's anemia and may be present independently of primary anemia.

The atrophy of the gastric glands is probably the result of a chronic infective gastritis in the majority of cases. Hurst has called attention to the possibility of a chronic gastritis being a definite causative factor in the etiology of gastric carcinoma. He is inclined to the view that the achlorhydria precedes the malignancy and is not the result of the new growth. For this reason, if no other, we should not neglect to search for, and treat with the greatest of care, a gastritis which not only causes the achlorhydria but also destroys the glands secreting pepsin, rennin and the hematopoietic ferments, the absence of which results in anemia of both the primary and secondary types. There is no doubt but that a temporary absence may result from a neurosis with a disturbance of the vegetative nervous mechanism, or from wasting diseases as mentioned by the essayist, but I am convinced that a gastritis at some period is a very definite factor in the mucosal degeneration and whether the infection is primary or blood-borne from some other focus, treatment of the condition is very important.

We are prone to accept achlorhydria as being more or less permanent and not to be too seriously considered. The physician may be forgiven many things, due to a lack of knowledge, but when he has the measures at hand to obtain such information and fails to use them, the sin of ignorance or indifference is unforgivable.

TUBERCULOSIS IN THE ELDERLY

W. H. MEADE, M.D.†

MANISTEE, MICHIGAN

In a perusal of voluminous literature on tuberculosis of the last ten years I was unable to find anything relating to the care and management of pulmonary tuberculosis in elderly patients.

In practically all public health problems of recent years relative to all other infectious and contagious diseases the origin, that is, the infective organism, be it man, animal or vegetable, has been sought for with care. It seems to me that a tremendous amount of work has been done in the control and treatment of phthisis but almost invariably the elderly have been overlooked in the elimination of the disease. This has been forcibly brought to my attention in my own practice in a town as small as 10,000, where the disease is more or less prevalent.

In three years I have found thirteen cases of pulmonary tuberculosis in elderly patients, the youngest being fifty-two, the oldest eighty-three, and six of them being seventy years of age or more. Of the thirteen patients, eight had positive sputums and were in no sense controlled patients from the standpoint of hygiene. The number of individuals exposed by these to the ravages of the disease are countless. All, with the exception of two, were living with their children and grandchildren. Of the children and grandchildren, there are known twenty-three cases of pulmonary tuberculosis, of whom nine have died. How many more is impossible to say because we have been unable to check them properly.

The control of these older patients offers a grave problem which can be met only by the physician who is alert to the possibility of the disease in these patients, many of whom have had so-called bronchitis, repeated attacks of gripe or influenza, tobacco cough, repeated attacks of hoarseness, and diarrhea.

We have been in the habit of offering to relatively young patients collapse therapy in all its forms, and rest for the control and treatment of the disease, both for the purpose of relieving ourselves of the infecting menace and to make them economically independent again. In the aged, the diagnosis is rarely made, but, if it is, the treatment should not be the repetition of platitudes and assuring the family that nothing

can be done. It is obviously a grave mistake for when we walk away from the door the family continues to be exposed to infection and possibly many others who visit with the patient frequently.

I have found that by explaining to the patient the seriousness of giving the disease to younger members of the family and others, and to the family the seriousness of having the source of infection in their midst, there is an immediate sense of co-operation. The essential hygienic measures are the use of sputum cups, covering of the mouth on coughing with gauze or absorbent paper, the efficient use of soap, water, lysol solution, and individual eating utensils.

A short term of instruction in an efficient sanatorium will be an advantage to the patient and his contacts. It is foolish, in the extreme, to feel or consider that members of a household and associates are already exposed and, therefore, too late to use preventive measures. One or two members may be infected but others may be saved by shutting down the supply of organisms. In some of these elderly patients, collapse therapy may be used to the extent that their sputum will become negative and even an arrest of the disease may be expected. Either a phrenic exeresis or pneumothorax may be employed.

This has been demonstrated in the following three cases which are here reported.

Case Reports

Case 1.—Mr. A. J. N., aged seventy-four, was seen in April, 1934. At the time, the patient complained of a long continued cough and a recent loss of 20 pounds in weight. His present illness began a year before, when he noted that he was coughing rather frequently and around twelve and one o'clock in the day he felt extremely tired. He consulted his local physician, who told him he had a chronic bronchitis and gave him treatment accordingly. He continued about his work and in his social activities until the fall of 1933 when his

†Dr. Meade obtained the degree of B.S. in 1929 from the University of Detroit. He graduated M.D. from the University of Michigan. He served as externe at the St. Joseph's Mercy Hospital, Ann Arbor, and as interne at the St. Lawrence Hospital, Lansing, Michigan. He has also been resident of the Michigan State Sanatorium at Howell.

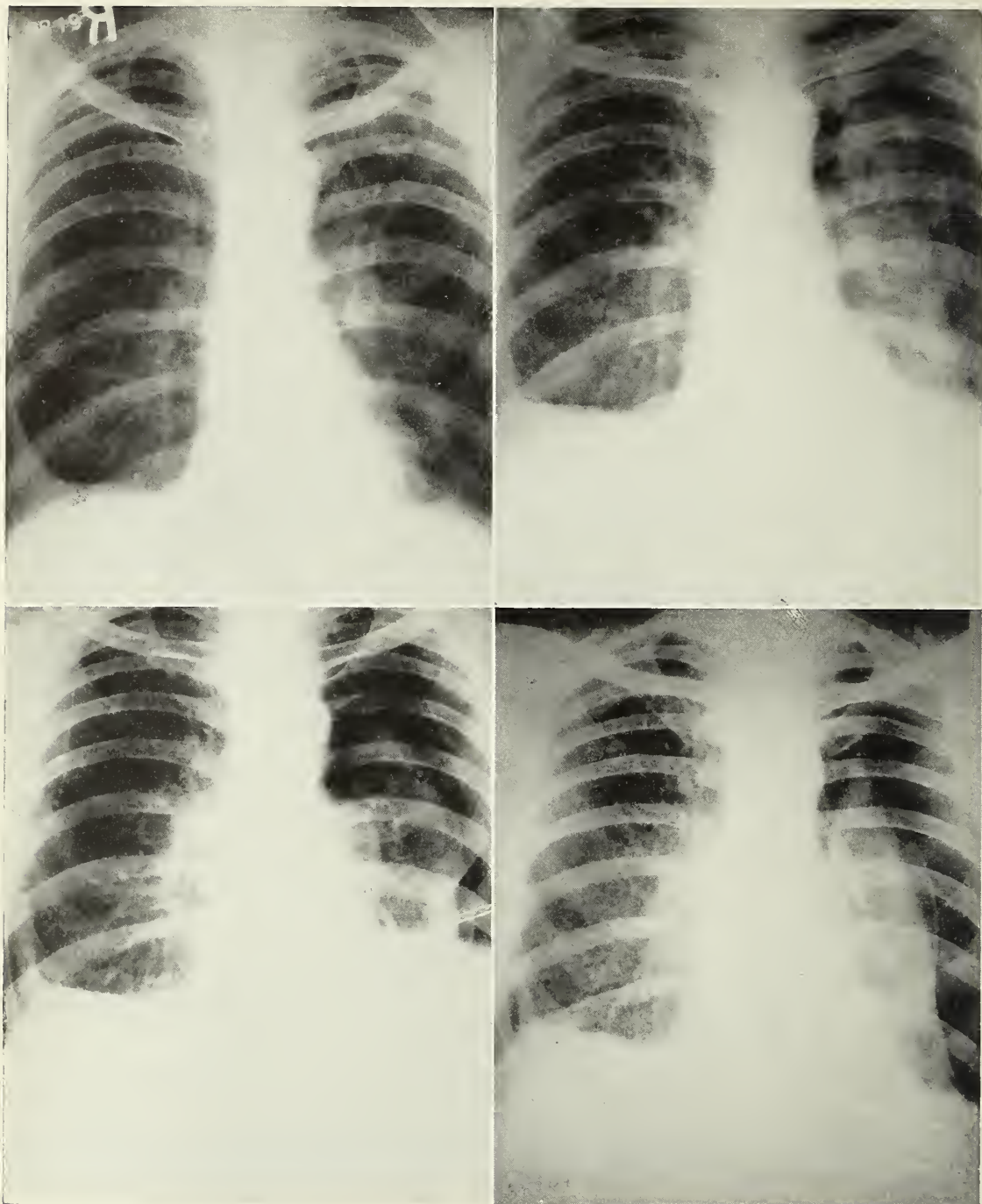


Fig. 1 (*upper left*). Case 1. Large cavity on left. Mixed lesion right apex. April, 1934.

Fig. 2 (*upper right*). Case 1. Pneumothorax on left. Fluid present. April, 1934.

Fig. 3 (*lower left*). Case 1. Left pneumothorax. Sputum negative. June, 1934.

Fig. 4 (*lower right*). Case 1. Fluid absent after numerous aspirations. Cavity closed. October 1, 1934.

loss of weight began to alarm him. He then consulted an eminent internist in Chicago, who investigated him thoroughly, and x-rayed him for gastrointestinal and genito-urinary neoplasms. He was then told that his heart showed some signs of muscular degeneration due to coronary sclerosis and

paranasal sinus disease. His activities were restricted. In February, 1934, he began to have night sweats. His cough continued, unabated, and in a period of sixty days he lost 20 pounds. On March 28, he raised a small amount of bloody sputum.

Past history: The patient did not remember of any childhood diseases, and he had had no operations. In 1907, 1925, 1929, he had pneumonia, each episode being followed by a protracted convalescence. He had had nocturia, one to two times for three years. Of importance in his family history, were the facts that one brother died of pulmonary tuberculosis in 1914, and one of coronary thrombosis in 1932.

Physical examination showed a tall, thin, elderly male who appeared chronically ill and was coughing frequently. His head, ears and neck were normal. The pupils of the eyes were equal and reacted to light and to accommodation, and an arcus senilis was present. The mucous membranes of the nose were swollen. He had an upper plate and a lower bridge. The thorax was symmetrical and had poor expansion. There was marked increase in fremitus over upper third in both lungs. There were bronchial breath sounds in the left lung at D. S. 3 and 4, with whispered pectoriloquy. Medium coarse rales were heard over the upper one-half in both lungs, more marked at the left. There were a few moderately fine crackling rales at the right base. The apex of the heart was inside the mid-clavicular line. The heart sounds were of fair quality with an extrasystole every four to six beats. No murmurs were heard. The aortic second sound was accentuated. The blood pressure was 114 systolic and 70 diastolic. The abdomen was scaphoid, otherwise normal. The genito-urinary examination showed a hydrocele on the right. The prostate was moderately enlarged. The rectal examination showed internal hemorrhoids. He had a dry, eczematoid skin in the lower one-third of both legs. Reflexes were present and normal.

Laboratory examination: The hemoglobin was 75 per cent. The Kahn test was negative. Chemical examination of the urine showed no albumin or sugar. In the microscopic examination there were 30 to 40 pus cells to a high power field, and no red blood cells or casts. The sputum on April 9, 1934, was positive, Gaffky 8.

His temperature was 101, pulse 80, and respiration 24.

On April 17, the patient was hospitalized and on the 19th a left pneumothorax was instituted. On the following day the patient developed a spontaneous collapse on the same side with considerable dyspnea, which was relieved by removal of air. Immediately following this he developed fluid on that side. Approximately an 80 per cent collapse was obtained. The patient was discharged home in one month and pneumothorax refills continued there. From May 27, 1934, until Jan. 1, 1936, his sputum has been continuously negative both by routine smear and culture. Fluid was aspirated in June, 1934, and at intervals after that until the pleural cavity became dry. In October, 1934, the patient had a spread of the disease in the base of the right lung which necessitated complete bed rest.

His temperature ranged from 97.8 to 99, pulse from 58 to 70, and respiration from 20 to 24. From November, 1934, to May, 1935, he had gained 28 pounds, temperature was normal, and he was resting comfortably at night without coughing. He carried on in various committees, kept in touch with business by correspondence and has been extremely careful in all his contacts. In May, 1935, he again developed fluid and a slight rise in temperature to 100 degrees which lasted over a period of one month. He had a concomitant loss of appetite and a drop in weight. The cough and sputum did not increase and the latter was still negative for tubercle bacilli by concentration test. From mid-August until the present, January 1, 1936, he has continued to improve, has regained twelve pounds, the sputum remains negative by smear and

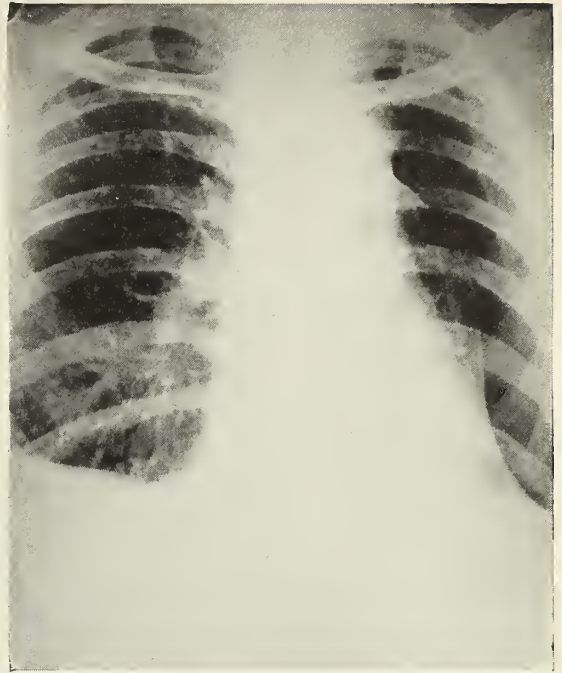


Fig. 5. Case 1. Left pneumothorax. Patient gained 30 pounds. Age seventy-six. April 30, 1935.

culture, and there continues to be a small amount of clear fluid in the pleural cavity.

Case 2.—Mr. T. M., aged sixty-two, was seen in June, 1933, at his home, complaining of hemorrhage which was brought on by coughing. Since January, 1933, when the patient had a severe cold which lasted for two months, he had been tiring very easily. At the time, he was indulging in alcohol more than moderately and he believed this the cause of his fatigue.

He continued to raise a small amount of blood for four or five days. An x-ray (portable) at this time showed an exudative lesion in the mid-lung field, on the right. His sputum at this time was positive. In his past history the only thing of note was the history of pleurisy and prolonged cold on his arrival in this country from Ireland, forty-seven years ago. His wife and four children are apparently in good health. As this patient was seen in consultation, I believe that no effort was made to have them checked.

One June 17, the patient was given a temporary right phrenic paralysis and put to bed. He remained there only three months and then continued about his business as before. He did not return for a check-up x-ray until January, 1934, at which time it was found the diaphragm was functioning but the lesion had entirely cleared, the hilar shadows remaining very prominent. His sputum was negative. Since that examination this patient has failed to report although he continues with his business and attempts to keep moderate hours.

Case 3.—Mr. J. F., aged sixty-six, was seen in consultation in October, 1933, complaining of severe fatigue and a constant hacking cough, beginning in July of the same year. As he had always had trouble with his nose and sinuses he believed that these were responsible for his symptoms. He had lost about nine pounds. His sputum was positive. He was conducting a retail trade at this time and, therefore, was coming in contact with a large num-

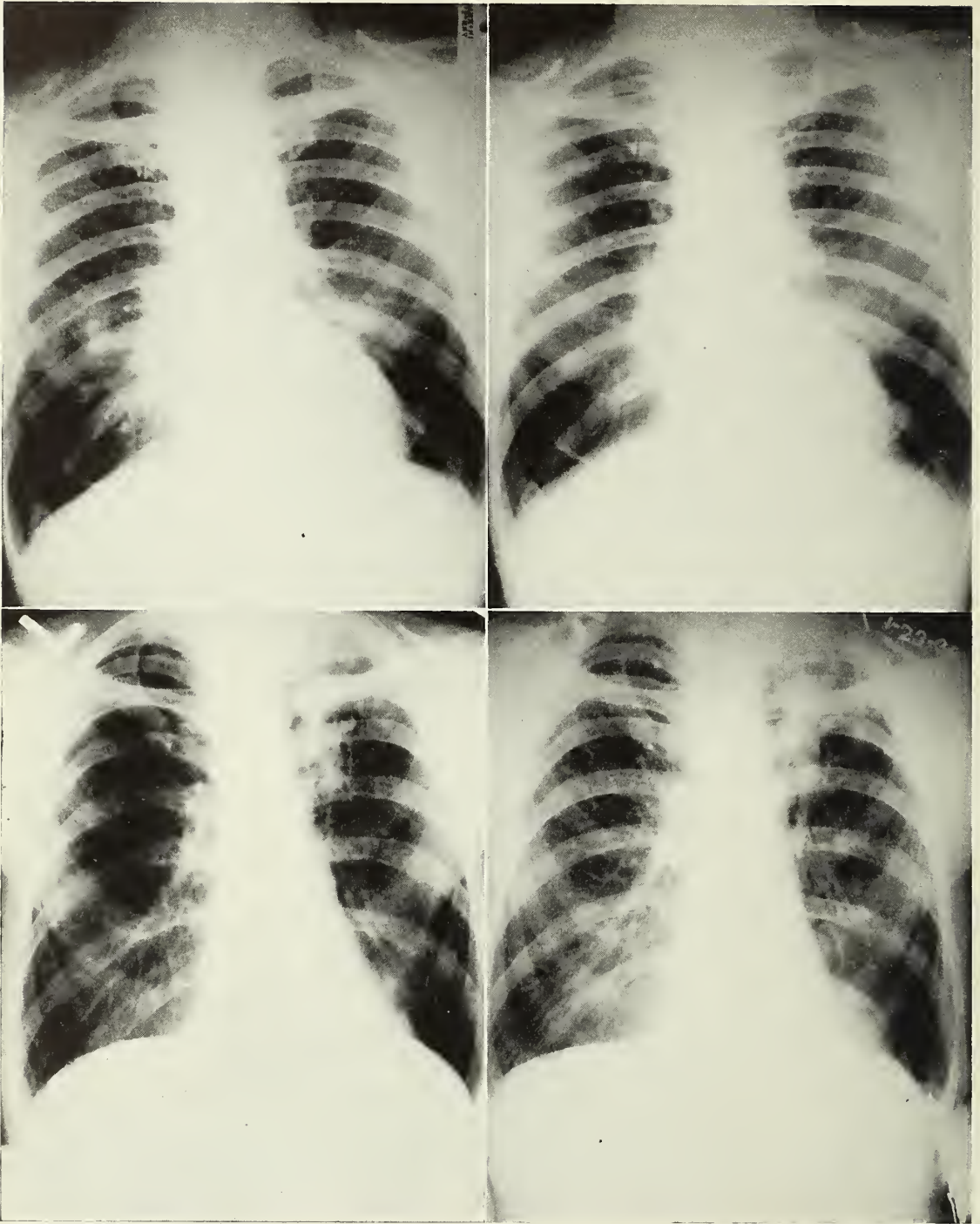


Fig. 6 (left). Case 2. Exudative lesion with cavity in the mid-lung field on the right. June 15, 1933.
 Fig. 7 (right). Case 2. Diaphragm functioning. Right lung field clear. January 28, 1934.
 Fig. 8 (left). Case 3. Mixed lesion on the left. October 2, 1933.
 Fig. 9 (right). Case 3. Slight increase in fibrosis. January 23, 1934.

ber of people. A permanent phrenic paralysis was advised and refused. A plate, taken in January, 1934, showed relatively little change in the lesion except for more stringy appearance suggesting healing. After six weeks rest the patient returned to

his business. Whether or not the patient has a positive sputum cannot be determined, because of the patient's lack of coöperation, due for the most part to the lack of advice and proper explanation from his attending physician. The thing of impor-

tance in this patient's past life was the history of numerous attacks of what he termed "grippe," relieved by short periods of bed rest and inactivity.

Comment

As has been shown, there has been considerable laxity among the profession in the recognition of phthisis among the elderly. In failing to recognize it we have failed to remove a very potent menace to our success in public health work.

Fishberg and Rubin have discussed the

problem of the elderly tuberculous individual and seemed to think that it is one of custodianship and segregation without any specific treatment. I am inclined to think the control of these sources of infection by radical measures, that is, collapse therapy, may save members of the family and their associates from a grave disease and a long-continued economic loss. These collapse methods may arrest the disease in the elderly but should be primarily used with the idea of eliminating a source of infection.

DISEASES OF PERIPHERAL ARTERIES*

WALTER G. MADDOCK, M.D.
ANN ARBOR, MICHIGAN

The intensive study of diseases of peripheral arteries during the past ten years has added considerably to the knowledge of these conditions, and, of equal importance, has served to arouse a general interest in the individuals so afflicted. The treatment of peripheral vascular lesions is a difficult problem. Alleviation of symptoms and return of the patient to a fair degree of activity is obtained only after concentrated effort, a close attention to details, a thorough knowledge of the possibilities of each situation, and of the value of available methods of treatment.

As patients are seen with peripheral arterial disease resulting in a lack of blood supply to the extremities, they fall very definitely into two main groups: (1) those whose symptoms are due to a vascular spasm with no, or only slight, organic changes in the vessels, and (2) those whose symptoms are due primarily to organic obstructing disease of the arteries. Although there is some overlapping, the two groups can largely be dealt with separately.

Vasospasm

Spasm of peripheral vessels results from abnormal stimuli to a definite physiological mechanism of the extremities. Besides the function of locomotion and prehension, the extremities are found to be importantly concerned with the heat regulating mechanism of the body.³ In cold weather, when heat is to be conserved in order to maintain the constant internal body temperature, blood is drawn in from the extremities to the vital head and trunk, and conversely, in summer, when heat has to be dissipated into a warm-

er environment, a considerable volume of blood is shifted to the surface of the extremities for cooling. These changes in the volume of blood to the extremities in response to the heat dissipating mechanism are brought about through varying degrees of vasoconstriction, which is most marked in the hands and the feet, and is under the control of the sympathetic nervous system. Abnormal stimuli to this system can produce vasoconstriction that has nothing to do with the heat dissipating mechanism, is a pathological process and can be properly termed a vasospasm. Skin temperature studies⁶ have shown that tobacco smoking produces vasospasm of the vessels of the extremities, the temperatures of the tips of the fingers and toes decreasing as much as 15° F. on the smoking of two cigarets. It is easy to demonstrate that fear, anger, and other emotional stresses also result in peripheral vasospasm.

It is difficult to evaluate the relative importance of vasospasm in peripheral vascular deficiencies due to thrombo-angiitis obliterans and arteriosclerosis. The primary le-

*From the Department of Surgery, University of Michigan. Read before the Michigan State Medical Society, Sault Ste. Marie, Michigan, September, 1935.

sion is the organic obstructing disease. During a period of acute inflammation and severe rest pain in thrombo-angiitis obliterans, a rapid play of colors and sweating of the feet is evidence of vasospasm. Little of this is seen in the less acute stages. In sudden arterial obstruction from embolism, thrombosis or trauma, the mottled bluish appearance of the extremity suggests the presence of a considerable vasospastic element. No test is needed to show vasospasm; we see its presence by direct observation.

The clearest example of a peripheral vascular disturbance, based on vasospasm, is Raynaud's disease. It is thought that the condition is a manifestation of an inferiority of the sympathetic nervous system expressed by heightened or abnormal reactions to ordinary stimuli.¹ The chief symptom is usually that of pallor of the fingers on exposure to cold, while between the attacks the digits appear to be normal. Cyanosis and sometimes rubor follow the pallor in varying degrees of irregularity and patchiness. Women constitute more than 90 per cent of the patients.

Allen¹ has emphasized the following criteria as necessary for the diagnosis of true Raynaud's disease: (1) intermittent attacks of changes of color of the acral parts; (2) symmetrical or bilateral involvement; (3) absence of clinical evidence of occlusive lesions of the peripheral arteries; (4) gangrene or trophic changes, when present, limited in large degree to the skin; (5) the disease must have been present for a minimal period of two years, and (6) there must be no evidence of disease to which it could be secondary.

The treatment advised for Raynaud's disease largely depends upon the severity of the symptoms. If there is no pain with the attacks of pallor and comparatively little increase in the extent of the involvement during the previous year, the use of contrast baths, hot soaks, vasodilating drugs, elimination of mental strain, and particularly efforts to avoid exposure to cold, may ameliorate the symptoms. If the disease appears to be progressing and the pain is considerable, a surgical attack on the sympathetic nervous system offers the best possibility of cure. In the late stages of the disease, when scleroderma, permanent cyanosis and trophic changes are present, the results of an operation on the sympathetic nervous sys-

tem are must less satisfactory, but no other treatment is known.

Vasospastic disorders of the extremities, as shown by a mottled blueness of the skin and sweating, occur secondarily to old anterior poliomyelitis, cervical rib, amputation, neuromata and arthritis. A sympathetic ganglionectomy has been of distinct benefit in well selected cases.

Organic Disease

More than 80 per cent of the patients with symptoms resulting from a lack of blood supply to the extremities suffer from an organic vascular occlusion. The chief cause is arteriosclerosis, frequently associated with diabetes mellitus. A lesser number of cases are the result of thrombo-angiitis obliterans.

A careful history from these patients frequently reveals that they had some symptoms for many months or even years before the infection or gangrene developed which ultimately sent them into a hospital. The factors precipitating the acute condition are found to occur repeatedly. There are many instances in which the feet were painfully cold for a number of hours during an auto ride or working outdoors in cold winter weather. Others lay their immediate troubles to the dropping of some heavy object on a toe, to the breaking of the skin over a pressure area by the shoes, to the paring of corns or calluses, or to the home treatment of a sore between the toes. In individuals with thrombo-angiitis obliterans, pain in a toe from ischemia has been often erroneously diagnosed as due to an ingrowing toenail, with later the development of an indolent ulcer or severe infection as a result of the surgical removal of the nail edge. Once gangrene is established in patients with organic arterial obstruction, the loss of limbs and even of life is frequent in spite of our best efforts.

It is now being realized that many of these individuals with peripheral vascular occlusion may avoid amputations indefinitely if they can avoid the abrupt damage that results from exposure to cold, trauma or infection. Also, if they can be carried over the period of emergency, they can again be restored to a circulatory balance permitting general activities, usually limited to some extent. To accomplish this purpose, it is

necessary to recognize arterial deficiency in its early stages so that the patient may be told what to do to live with his condition, and to avoid the serious acute injuries.

The diagnosis of arterial obstruction is a simple procedure in most cases, instrumental studies rarely adding information that cannot be obtained by a careful history and physical examination. Samuels⁸ has stressed the following points as indicative of incipient arterial disease in the extremities:

Symptoms:

1. Fatigue of the lower extremities after walking a few blocks.
2. Coldness of the toes of the affected foot.
3. Tingling or burning in the sole of the foot after walking a few blocks.
4. Intermittent claudication. This is often a relatively late symptom.

Signs:

1. Atrophy of the calf muscles.
2. Coldness of the extremities, particularly when unilateral.
3. Pallor of the plantar surface of the affected foot when the legs are elevated to about 45° angle and the ankles are rapidly flexed and extended.
4. Rubor of the feet on dependency.
5. Decreased amplitude of the peripheral pulses. A careful palpation of the brachial, radial, ulnar, femoral, popliteal, dorsalis pedis and posterior tibial arteries for pulsations should be a part of every physical examination. To reach the popliteal artery the patient should be lying face down with the leg flexed to 90° and supported there by the examiner so that the hamstring muscles are relaxed. In about 5 per cent of the cases the vessels at the wrist and ankles will feel to pulsate normally, the occlusion being distal to those points.

Once the diagnosis of arterial obstruction is made, the determination of whether one is dealing with arteriosclerosis or thrombo-angiitis obliterans, the two most common causes of chronic peripheral vascular deficiency, is generally not difficult. There is a great tendency to make the latter diagnosis too frequently. Buerger's disease or thrombo-angiitis obliterans is an interesting condition. We do not know why it affects Jewish individuals to a greater extent than their ratio of the population or why women are so very rarely involved. Tobacco smoking is widespread and apparently without harmful effect to the vast majority of the population, and yet here is a group of individuals who are made definitely worse by its use. The peripheral vasoconstrictor effect of tobacco smoking further reduces the already

deficient circulation in the extremities of these patients.⁶ It must be remembered, however, that hardening of the arteries is by far the commonest cause of peripheral arterial occlusion. The differential diagnosis can practically be made on age alone. Thrombo-angiitis obliterans rarely begins after 45 years of age and such a diagnosis on an individual whose symptoms began after that time should be seriously questioned. If there is evidence of a migratory superficial phlebitis one can be sure that he is dealing with Buerger's disease. The arteriosclerotic patient is generally over fifty-five years of age. Exceptions to this of course occur, and occasionally arterial obstruction on an arteriosclerotic basis is found in patients well under forty-five years of age, but usually associated with diabetes mellitus. Roentgenograms of the extremities demonstrating calcification of arteries commonly denotes arteriosclerosis.

Conservative Measures

Just what can be done in the management of patients with acute phases of arterial occlusive disease short of extensive gangrene or spreading infection, to avoid major amputations and to return the individual to a fair degree of normal activity? In the past ten years many measures have been advocated. With considerable use, some have been found to be of obvious value, while others have added little. The importance of the different forms of treatment varies somewhat with the specific problems with which one is confronted. At the University Hospital, the first nine of the following measures are employed routinely in the conservative treatment of peripheral occlusive disease and the remaining are used singly or in combination where they appear to fit the need of the case:

1. *Rest in bed:* Treatment must be continued through twenty-four hours of the day. If the patient is allowed up and about, some of the desired measures are often neglected. Rest pain is sometimes relieved by bed rest alone.

2. *Keeping the affected extremity at the level of optimum circulation* (Buerger's angle of circulatory sufficiency): Pallor of the feet on elevation and rubor on dependency has been pointed out as important signs of vascular deficiency. Obviously these positions then are not the proper ones to keep the feet in at all times. Generally when the feet are placed about 6 inches below the level of the heart, the veins fill without appearing to be distended and the toes show their most normal color. Once the

patient has been told of the importance of this position and finds the optimum level by experimenting, he is usually anxious to maintain it whenever possible. To obtain the proper position, it may be necessary to elevate the head of the bed a few inches.

3. *Hygiene of the feet:* Dirty feet are a definite hazard to these patients as shown by the greater occurrence of gangrene among those so afflicted. The patient is taught to wash his feet with a mild soap and warm water and then to dry them carefully without rubbing the skin. Emphasis is placed on keeping the spaces between the toes clean and dry. A liberal amount of lanolin ointment is then rubbed in to soften the skin and prevent cracking and fissuring.

4. *Heat:* More harm is done by the use of direct heat in the form of hot water bottles or electric pads to the feet of these patients than any possible benefit. Sensation is frequently diminished and a burn may necessitate a major amputation in a short time. Since we have shown that the "environmental response" to heat is a shift of blood to the surface of the extremities,⁴ an electric pad to the patient's abdomen and an extra blanket serves to keep the whole body warm and will result in as much vasodilatation of peripheral vessels as is possible. The legs and feet during this time are encased in flannel stockings and protected under a cradle.

5. *Hot wet dressings of saturated boric solution to control infection:* Wet dressings can be used for too long a time on these patients. The skin of the feet of these patients becomes macerated very easily so that a number of hours of exposure to the air is often advisable between the applications of the hot wet packs. Ulcers that have been open for weeks under wet dressings will sometimes heal quickly under a dry dressing. There is a tendency to keep at some of these lesions too much and not give them a chance to heal under a dry crust.

6. *Control of diabetes mellitus, otherwise a high caloric high vitamin diet.*

7. *Intake of four quarts of water a day.*

8. *Eradication of foci of infection.*

9. *No smoking.* This is absolutely advised against for patients with thrombo-angiitis obliterans; less emphasis is placed upon it for the arteriosclerotics.

10. *Therapeutic fever.* The production of fever is one of the most satisfactory methods of increasing the peripheral circulation. The body temperature can be rapidly elevated by the use of typhoid¹ vaccine or typhoid "H" antigen.² The elimination of this heat is brought about over a period of many hours by a considerable shift of blood to the surface of the extremities. This is to the advantage of the patient with arterial obstruction, since vascular channels are dilated to their maximum and reparative processes are aided. The measure is particularly applicable to individuals with thrombo-angiitis obliterans. It is not advised for the arteriosclerotics, since older patients are considerably upset by the chills, nausea and headache which occasionally occur and have been known to develop acute thromboses at that time.

11. *Hypertonic salt solution.* The use of a 5 per cent solution of sodium chloride intravenously is enthusiastically praised by Silbert⁹ in the treatment of thrombo-angiitis obliterans. The rationale of the method is on theoretical grounds only, but the number of individuals returned to their occupation and the low percentage requiring amputations certainly recommends this form of treatment, which can be carried out in an office practice. At the first injection 150 c.c. of a freshly prepared 5 per cent solution of NaCl is given intravenously into a superficial

vein. The patient usually becomes warm and thirsty during the administration, but is not materially inconvenienced and is allowed to return to work as soon as the treatment is finished. Subsequently 300 c.c. of the solution is given three times a week, later twice and once a week as symptoms abate.

12. *Block of peripheral nerves for pain.* This procedure^{10,11} is carried out for unrelieved rest pain in patients with thrombo-angiitis obliterans. When used for severe pain in arteriosclerotic occlusion it has been less satisfactory, since in several instances when no relief has been obtained by other methods a major amputation was required in a short time.

13. *The use of alternate suction and pressure.* This form of treatment designed to increase the blood flow in the extremities is about 100 years old. Since 1933, as a result of the work of Landis and his associates⁵ and Reid and Herrmann,⁷ a new interest has been aroused in its possibilities. My experience with passive vascular exercise or "Pavaex" treatment as it is called by Reid and Herrmann, is of too short a duration to judge its merit from actual observation. From important articles by competent observers and reasonable conclusions as to what can possibly be done I can present an opinion.

The most startling results have been reported in instances of acute major arterial obliteration in the extremities as by operation, thrombosis, trauma or embolism. In the hands of Reid and Herrmann a number of such patients have been returned to normal life. Frozen feet have also responded admirably to treatment. The value of "Pavaex" therapy diminishes as the far advanced stages of slowly progressing arterial occlusion are reached. The vessels here have not only no, or abnormally small, lumina, but also their walls are more or less rigid owing to structural changes so that they are unable to dilate. Little can be expected from variations in pressure in such instances. Intensive "Pavaex" therapy has relieved rest pain and healed indolent ulcers in many instances. Deeply extending gangrene or large sloughs involving the forefoot have not been benefited. There is a fairly large group of patients with peripheral arteriosclerosis associated with diabetes mellitus who enter the hospital with infections and gangrene limited to toes. The fact that the forefoot is not involved is evidence of a fairly good arteriolar bed. Some pulsation can often be felt in the dorsalis pedis or post-tibial arteries. Following a guillotine amputation of the involved toe, "Pavaex" has resulted in a more rapid healing of the wound than it was customary to see without its use.

"Pavaex" therapy is being used with caution for patients with thrombo-angiitis obliterans. During the acute phase when there is severe rest pain and superficial phlebitis, the massaging action of suction and pressure

may do harm and is not advised. When the pain is slight and the inflammatory process less evident, "Pavaex" therapy has been beneficial.

The use of positive and negative pressure in the treatment of peripheral vascular disease is not a cure-all and was never presented as such by its proponents. With the rather widespread placing of equipment at the present time one may soon expect numerous reports tending to establish the place of this form of physical therapy among the non-operative methods of treating peripheral vascular diseases.

At various times the use of vasodilating drugs, diathermy, ligation of the femoral vein or artery, and sympathetic ganglionectomy have been used in the treatment of patients with progressive vascular occlusion, but with no evidence that the procedures were of real value.

The list of conservative measures given is impressive, but in spite of carrying them out with the greatest of care, the results are often discouraging. This is due in part to the fact that many of the patients seen have far advanced arterial occlusion. For some of them conservative measures are clearly contraindicated. A major amputation is needed and the sooner it is done the better. When the conservative treatment is used, constant vigilance is necessary in following the progress of the patient. The foot lesion may become worse and there is always the possibility of a rapid spread of infection with a forced amputation under adverse conditions and an ultimate higher mortality.

Home Care

It is important that the patient should know what can be done in his routine living to prevent the occurrence of a serious crisis in a chronic peripheral vascular deficiency. Usually his activities are restricted to some extent by the disability present, so that he is concerned about his condition and will do whatever is advised. The following instructions are given by us to ambulatory patients:

Instructions for Care of the Feet.—Because of the diminution in the blood supply to your feet, continued special care is necessary to prevent serious difficulties. The following measures are recommended:

1. Wash the feet each night with mild soap and warm water. Be particularly careful about the spaces between the toes.

2. Dry the feet carefully without rubbing the skin and then gently massage them with vaseline or lanolin ointment.
3. Keep your feet warm at all times. Wear long, heavy underwear. Use a clean pair of woolen socks each day in winter and white cotton socks in warm weather. Extra footwear, such as galoshes, will help in winter.
4. Protect your feet from injury at all times. Wear properly fitting shoes and be particularly careful that they are not too tight.
5. Wear loose fitting bed socks at night. Do not apply hot water bottles or an electric pad to your feet; a burn is serious.
6. Toe nails should be cut straight across. Do this in a good light after the nails have been softened by a 20 minute soak in warm water.
7. Do not cut your corns or calluses.
8. Drink three to four quarts of water daily.
9. Eat a liberal diet with plenty of fresh vegetables. If you have diabetes, follow the instructions in that regard faithfully.
10. Do not wear circular garters.
11. Carry out the leg and foot exercises as prescribed.
12. Follow the advice about tobacco.
13. If anything unusual develops, a blister, infection, an ingrowing toe nail, or trouble with bunions, corns or calluses, see your doctor immediately.

Real progress in the care of peripheral vascular deficiencies will result from an earlier diagnosis of the disease, a realization of the seriousness of the condition, and the carrying out of measures to maintain the circulatory balance and prevent the critical damage of cold, infection or trauma.

Bibliography

1. Allen, E. V.: Diseases of peripheral arteries. Jour. Kansas State Med. Soc., (April) 1935.
2. Barker, N. W.: Typhoid "H" antigen. Further observations on non-specific protein therapy in peripheral vascular disease. Proc. Mayo Clinic, 5:267, 1930.
3. Collier, F. A., and Maddock, W. G.: The function of peripheral vasoconstriction. Ann. Surg., 100:983, 1934.
4. Collier, F. A., and Maddock, W. G.: The differentiation of spastic from peripheral vascular occlusion by the skin temperature response to high environmental temperature. Ann. Surg., 96:719, 1932.
5. Landis, E. M., and Hitzrot, L. H.: The clinical value of alternate suction and pressure in the treatment of advanced peripheral vascular disease. Am. Jour. Med. Sci., 189:305, 1935.
6. Maddock, W. G., and Collier, F. A.: Peripheral vasoconstriction by tobacco and its relation to thromboangiitis obliterans. Ann. Surg., 98:70, 1933.
7. Reid, M. R., and Herrmann, L. G.: The non-operative treatment of peripheral vascular diseases. Ann. Surg., 102:321, 1935.
8. Samuels, S. S.: The diagnosis of incipient arterial disease in the extremities. Health Examiner, (Oct.) 1933.
9. Silbert, S.: Thrombo-angiitis obliterans. Treatment of 524 cases by repeated intravenous injections of hypertonic salt solution. Surg., Gynec. & Obst., 51:214, 1935.
10. Silbert, S.: A new method for the treatment of thrombo-angiitis obliterans. Jour. A. M. A., 79:1765, 1922.
11. Smithwick, R. H., and White, J. C.: Peripheral nerve block in obliterative vascular disease of the lower extremity. Surg., Gynec. & Obst., 60:1106, 1935.

SUBPECTORAL ABSCESS

Suppurative Infraclavicular Lymphadenitis with Report of One Case

ROBERT D. SCOTT, M.D.†

FLINT, MICHIGAN

WE ARE all familiar with the lymphatic involvement which is secondary to infected fingers, and usually look for swelling and tenderness in the epitrochlear and axillary lymph nodes. There is a condition which is not generally known, on account of it being very uncommon. This is a lymphatic metastasis to the infraclavicular nodes, without any swelling of the axillary or epitrochlear lymphatic glands.

The usual symptoms are as follows: There is a history of an injury or infection to one of the fingers. This may be so slight that it may be overlooked, unless the patient is questioned about it. Several days later the patient will complain of soreness, stiffness, aching or pain in the region of the shoulder. Pain on pressure will be noticed just below the middle of the clavicle. Abduction of the arm is painful, usually extremely so. These symptoms will continue for several days with little or no swelling. The fever at first is not high, running from 99° to 101°.

I think it would be well to go over the lymphatic drainage of the upper extremity. The lymphatic nodes of the arm are, for the most part, confined to its upper portions, the principal group occurring in the axilla. These glands receive almost the entire lymphatic drainage of the arm as well as the anterior and lateral thoracic walls, from the mammary gland and from the scapular region.

The epitrochlear node or nodes lie about 3 or 4 cm. above the trochlea and receive some of the afferent vessels from the ulnar fingers and the ulnar portion of the hand. However, some of these lymph vessels from this area empty directly into the axillary nodes.

Another group, which is called the delto-pectoral group, consist of from one to four nodes, situated in the groove between the deltoid muscle and the clavicular portion of the pectoralis major.

The infraclavicular group consist of from six to twelve nodes situated near the axillary space, partly beneath the pectoralis minor and partly above the upper border of that muscle. They constitute the final link in the chain, since they receive as afferents, either directly or indirectly through the intermediate nodes, the efferents from all the other sub-groups. The only direct afferents they

receive from the upper extremity is the satellite trunk from the cephalic vein.

The efferents from the infraclavicular group unite to form a trunk of considerable size, the subclavian trunk, which, from its origin opposite the first intercostal space, passes almost vertically upward over the subclavian vein to open into it near its junction with the external jugular, or else to unite with the jugular trunk on the right side or to open into the arch of the thoracic duct on the left side. It is clear, then, that when the organisms fail to be stopped by the axillary nodes and reach the infraclavicular nodes, and when these nodes suppurate, it is a serious condition, as these nodes are the last barrier, and the organisms are likely to reach the general circulation, and result in septicemia.

The pus forms in large amounts, after the nodes have broken down. It does not come to the surface early, on account of its location beneath the pectoral muscles and fascia, but spreads out laterally, and may invade the axillary region, or even the subscapular region, as in a case reported by David Straus. It may also penetrate the intercostal muscles and pleura and enter the pleural cavity, or follow the large vessels and reach the supraclavicular fossa, as in a case reported by Levy. What I am trying to point out is that there is very little tendency for the pus to become superficial, and so it is clear that early surgical intervention is necessary.

The diagnosis of this condition is easy, as the history and physical findings are usually the same in all cases.

The usual symptoms and physical findings are:

1. Fever, if seen early, is mild, from 99° to 101°. Later it may be of the septic type, and may reach 103° or 104°.

†Robert D. Scott, M.D., is a graduate of Detroit College of Medicine, 1911. He practices in Flint, Michigan, and at present is president of the Genesee County Medical Society.

2. Any attempt at abduction of the arm causes pain, and it is usually held quiet and adducted.

3. Pain on pressure just below the middle of the clavicle.

4. There is usually some swelling over the upper outer part of the pectoralis major muscle.

5. There may be present an infection of the hand or one of the fingers. If not present we can usually bring out the fact that some time previous the patient had such an infection or abrasion.

The treatment of this condition is early incision and drainage. Even if we do not find pus, we can be sure it will appear as soon as the glands have broken down, and will drain through our incision, if properly placed.

The technic is as follows: The patient should have a general anesthetic. Abduct the arm. Make the incision along the outer border of the pectoralis major muscle, high in the axilla. Expose the outer border of the muscle and incise the axillary fascia. Then, with the gloved finger, dissect under the muscle. If the case has advanced to suppuration, we will now enter the abscess cavity. If done early we will encounter nothing except some serous fluid or edema of the soft parts. In either case the treatment is the same. We must open wide and provide good drainage.

One point should be noted. Do not use the needle in these cases in an attempt to

find pus. The needle might enter the pleural cavity, carrying the infection with it, or might enter the subclavian vein, which is in close proximity to the infected glands.

Case 1.—Mrs. M. E., aged forty-seven, was well until June 10, 1935, when she began to have pain in her right thumb. I was called during the evening of that date, and found that the right thumb was swollen on the palmar surface of the distal phalanx, and painful on pressure. I advised incision of the swollen area but patient refused. Two days later I was called again, and found the thumb swollen more, and incised it. This gave her some relief, but there was very little drainage from the thumb during the next week. On June 18, she began to have pain in her right shoulder and below the right clavicle. On June 21, she could not move her right arm away from her side without causing pain, and the pain continued around the right shoulder and the upper part of the right chest. Her temperature during this time was between 99° and 101°. She entered the hospital on June 24. Her temperature on admission was 101°, pulse 96, and respiration 22. The following day, under nitrous oxide and ether anesthesia, the anterior part of the right chest and the right axillary region was prepared with tincture of iodine. An incision was made, about four inches long, along the outer border of the right pectoralis major muscle. The right index finger was inserted under the pectoralis muscle and entered the abscess cavity. All of the septa were broken down by sweeping the finger around, underneath the muscle, allowing about six ounces of pus to escape. Glove drainage was inserted into the abscess cavity. Her temperature the following day was 102°. For the next five days it was usually about 98° in the morning and 100° at night. From July 2 to her discharge from the hospital on July 5, her temperature was normal. She was entirely recovered by July 16.

Bibliography

Straus, D. C.: *International Surgical Digest*, (November) 1935.

Therapeutic Results With Ketogenic Diet In Urinary Infections

Henry F. Helmholtz, Rochester, Minn. (*Journal A. M. A.*, Sept. 7, 1935), believes that the ketogenic diet in childhood is to be reserved for infections that do not respond to simple therapeutic procedures. To treat every child who has an acute urinary infection with the ketogenic diet would be entirely unnecessary. The majority get well and the urine becomes sterile with the usual alkalization and forcing of fluids. In some cases it later may be necessary to give ammonium chloride and methenamine for a short time. A small group remains in which there is no obstruction of the urinary tract but in which the infection becomes chronic in spite of the usual types of treatment. The infection will usually clear up promptly as a result of administration of the ketogenic diet. The author has tried the ketogenic diet in a series of twenty-four cases of infection of the urinary tract without obstruction. In some of these cases the infection probably would have been cleared up just as readily by other means as it was with the diet, but in order to test out the efficacy of this new mode of treatment the dietary treatment was used. In all cases in which the necessary concentration of beta-oxylbutyric acid and the proper pH could be obtained, the urinary infection

cleared up very promptly. There were several instances in which the urine was sterile after forty-eight hours. In a number of these cases, ammonium chloride and methenamine had been tried without success. In the fifteen cases in which there was no return of the infection, the cure was often extremely rapid. In six cases there was a marked tendency for the infection to relapse. Three of these patients lived near the clinic and the various recurrences of the urinary infection could be followed for a period of years. The urine of two other patients was sterile when they left the clinic but the infection recurred soon after they arrived home. Another patient returned in six weeks for a second dietary treatment and has not had a recurrence of the infection for about a year. In three cases a proper ketosis or a low pH could not be obtained in spite of the fact that the children took the diet without difficulty. In a series of twenty-one cases of urinary infection in which there were a great variety of severe obstructive lesions of the urinary tract, six patients have remained free from infection for a period of time after discontinuing the diet, in five there has been a recurrence after a period of freedom from infection after discontinuing the diet and in ten cases it was impossible to influence the infection at any time.

WHAT THE PUBLIC EXPECTS FROM THE MATERNAL HEALTH LEAGUE*

HAROLD A. FURLONG, M.D., F.A.C.S.†
PONTIAC, MICHIGAN

THE remarks I have to make on this occasion will be very brief. During the past six years, the Maternal Health League of Michigan pioneered in a much needed Birth Control movement. The growth has been steady, sound and properly sponsored. The movement has passed from the stage of speculation into the realm of accomplished fact. The public has accepted and supported the Maternal Health League, and because of that support we have a responsibility to discharge?

Social problems are born out of a complexity of human affairs, and do not spontaneously arise. For centuries, probably as long as the human race has endured, control of contraception has been a problem. Lest the recent Birth Control movement be considered by the uninformed to be a modern innovation, let me say that it had its roots in antiquity, and is so recorded in scientific history. Modern civilization has only made the realization of this problem more acute. We are appalled by the toll of human lives lost annually by ill-considered attempts to adjust this problem of family size and family income. Legendary and unscientific methods having failed, the average family turns to abortion—self-induced or criminal—with the result that it is estimated that 8,000 American mothers die annually from causes attributed to abortion. This constitutes half the annual deaths of 16,000 from causes associated with childbirth. Some medical authorities estimate as many as one million abortions are performed each year.

Death, illness or economic loss from causes attributed to abortion certainly must shake the foundation of family life in many homes if these figures are true. Established clinics have already revealed that it is married women from twenty-five to forty years of age, after several children have been born, who resort to abortion. In our own local clinic, during 1935, the average number of pregnancies per client, who sought advice, was 5.7; the average number of living children was 4.6. Another interesting fact that clinic research has established is

that clinics are not offering unwanted advice to their clients, as most of them have already tried the usual contraceptive measures without success. Again, in our clinic, 61.8 per cent of our patients gave a history of using some device or measure to prevent conception.

For years we have refused to face scientifically this social problem, until the movement has surged up from the general public. Within the last decade such organizations as this have met the challenge and are now embarked on a constructive program. As I previously remarked, we have a responsibility to discharge because of public support and demand. In my opinion the public has definite expectations of this group which we may well acknowledge.

First of all, the public expects leadership. That leadership has been furnished in this State by an enlightened group of sponsors, lay and medical, who have not been afraid to organize, support and publicize their work, avoiding stunts and controversial squabbling. No movement as worthy as the Maternal Health League profits by undignified debates between opposing groups. The issue becomes lost in the clash of personalities. So little is yet known of the science of this subject that polemics offer little real value. More value to the cause will come from scientific leadership and the public expects it.

Secondly, a broad educational program is expected, directed towards the research laboratory and the agencies in contact with the public. From the scientific angle too little has been known about contraception. Much is to be done in the laboratory yet. It is a strange anachronism that modern medicine has progressed so far and yet neglected this important field of science. The best interests of all concerned are served if the

*This address was delivered at the annual meeting of the Maternal Health League of Michigan at Hotel Hays, Jackson, Michigan, January 30, 1936. Dr. Furlong is chairman of the medical advisory committee of the league.

†Dr. Furlong was graduated from the University of Michigan Medical School in 1924 and took post-graduate work in Obstetrics and Gynecology and entered private practice in 1929. He is a Fellow of the American College of Surgeons, 1931, Chairman of the Section of Obstetrics and Gynecology of the Michigan State Medical Society in 1934 and at present a member of the committee on Maternal Health, Chairman of the Advisory Board of the Maternal Health League of Michigan. His private practice is limited to Obstetrics and Gynecology.

medical profession acts as the purveyor of contraceptive advice as a part of its preventive medicine program. This means that medical students must be taught contraceptive information, and many medical colleges are now doing that very thing, and physicians in practice must be furnished with the latest information from medical centers, and organized medical groups must be contacted.

These things are already started in many localities. I believe the public even looks to a broader program than one just concerned with the control of families. The organized medical groups have been fighting a lone battle to reduce maternal mortality and certainly ought to welcome the aid of a lay group, such as this, to augment their forces. Many social service and governmental agencies in contact with underprivileged homes are looking to this organization for help in their problems among the poor, so that close contact should be maintained between the Maternal Health League and other social agencies.

The legislation situation dealing with the dissemination of information and supplies has not been entirely clarified. The sponsors of the Michigan program can be very helpful in working with other groups to alter the Federal and State laws which now act as a barrier to action in some localities.

The public expects sound advice to be available for the lawmaker as an aid in this field.

The public does not want sensational entertainment from us. It wants sober, constructive help to meet threatening social problems of fundamental importance in maintaining family life. The groups calling loudly for our help are the mothers shuddering under the spectre of unwanted babies to feed and clothe. We have already demonstrated that we are not interested in unmarried clients. We might well be interested in the broad subject of education in sex hygiene but that is a matter for future consideration.

There is a certain danger in over-enthusiasm. Many socially-minded people are a little prone to deny the right of parenthood to the poor. Poverty is not a crime, and parenthood among the poor is not to be so regarded. The element of voluntary use of contraceptive advice by women is to be respected as it has been in the past.

I would advocate a conservative program embracing scientific research, the accumulation of data, the continuation of educational work among social agencies, and careful sponsorship under medical guidance, giving the public the desired help without sensational publicity or commercial exploitation, in other words, continuation of the present laudable endeavor.

NOMINAL OR AMNESIC APHASIA WITH REPORT OF A CASE*

HYMAN S. MELLEN, M.D.†

and

ISAAC L. POLOZKER, M.D.‡

ELOISE, MICHIGAN

SPEECH may be defined as a means of communication between human beings. It depends upon a comprehension of thought, the elaboration of this thought, and finally upon its expression. Aphasia is simply a disorganization in the domain of speech. The disturbance may be in any one or all of the dependent components. Head feels that speech is a highly intellectual process, terms it "symbolic thinking," and, unlike many of his predecessors, he does not feel that the divisions of speech are capable of independent existence in circumscribed areas in the cerebrum.

It is in the idea of cerebral localization that most of the argument concerning aphasia has arisen. It was Gall, early in the nineteenth century, who first suggested the

idea of cerebral centers for localization of various functions. He reported a case of aphasia with injury to the inner and posterior portion of the left "anterior lobe" of the brain. Bouilland continued this work of cerebral localization. He stated, "It is important to distinguish the two causes

†Dr. Mellen is a graduate of Wayne University College of Medicine, June, 1933. He is Resident in the Departments of Internal Medicine and Neurology at Wm. J. Seymour Hospital, Eloise, Michigan.

‡Dr. I. L. Polozker, who was Attending Neurologist in Seymour Hospital, died August 21, 1935.

which may be followed by loss of speech, each one in its own manner; one by destroying the organ for the memory of words, the other by alteration of the nervous impulse which presides over the movements of speech."

In 1861, Broca gave a complete anatomical account of the lesion in a case of aphasia. He considered that the condition was the result of a lesion in the posterior third of the second and third frontal convolutions.

It is with this latter concept that Hughlings Jackson and, after him, Henry Head, disagree most strenuously. Both approach the problem of aphasia from the psychological rather than the anatomic or physiological angle. The rigid conception of centers is not warranted if one is to accept the clinical experience of Head. In his work he has shown that no case of aphasia ever presents circumscribed speech defects. It can be shown, after careful study, that in every case varying defects of all types exist, although one type usually predominates.

Before we can continue further in a discussion of types of aphasia, we must make clear the various classifications which have arisen.

If speech conception is entirely lost, complete aphasia is said to exist. However, this condition is of rare occurrence and, therefore, a more minute study is essential. If the patient can hear but does not know the meaning of words, word-deafness is diagnosed. If, on the other hand, the defect is in understanding written language, the condition is known as word-blindness, alexia, or visual aphasia. Auditory and visual aphasia together constitute the sensory aphasia of Wernicke.

If, on the other hand, the defect is in the actual production of the spoken word, it is designated as the motor aphasia of Broca. Motor defects also occur when the patient cannot write a word although he knows what he desires to write.

From these concepts of speech formation and speech production has arisen the idea that each one of these lesser faculties of speech has a fixed center in the brain. Thus, centers are said to exist which, when affected, give "pure" motor aphasia, "pure" sensory aphasia, "pure" alexia, and so forth. With this as a basis, aphasia has been further subdivided into cortical motor, subcortical motor, cortical auditory, subcortical auditory, cortical alexia, subcortical alexia, and

into transcortical varieties of each, depending upon whether the centers themselves are involved, the peripheral fibers from them, or the fibers between the sensory and motor centers are involved.

With all of this elaborate anatomical scheme little actual pathological material has been brought forth to prove definitely such a concept. And, what is far more important, no case can be brought forth which actually falls into any one type of aphasia. All that can ever be said for these cases of aphasia either clinically or at autopsy is that they are "mixed aphasias." Apparently, our knowledge of speech centers, association traits, and the physiology of the cerebrum in general is too scant to definitely name a type of speech defect and accurately localize the pathology associated with it.

Now to return to our original definition of speech and aphasia. We said that speech is dependent upon a comprehension of thought, its elaboration, and its expression. Aphasia, we said, is simply a disorganization in this cycle. It is quite true that the disorganization may be in any phase of the development of the thought but clinically it is usually or at least quite often difficult to ascertain where the disorganization has occurred. To localize thought processes in the cerebrum is ridiculously impossible, and so to localize definitely aphasia, which is a thought process, is also out of the question.

It is from this psychological angle that Henry Head has approached the problem. He defines aphasia as a failure in a greater or lesser degree of "symbolic formulation and expression." He maintains that before speech can result there must be a formulation of a symbol—a sort of internal speech—and then, from this, external or audible speech results. To localize this thought mechanism is purely arbitrary and useless. He discards previous classifications and ideas of circumscribed speech areas in the brain and presents one which is entirely based on language concepts.

1. *Verbal defects.*—This is a disturbance of external speech. Vocabulary is limited and those words which are retained are mispronounced. The patient is cognizant of his errors (he symbolizes well) but cannot express himself correctly.

2. *Nominal defects.*—There is a want of power to discover appropriate names, or to find categorical terms in which to express a situation. The patient possesses plenty of

words, but he cannot apply them exactly and verbal form may suffer in his efforts to discover the correct name.

3. *Syntactical defects.*—This is a more or less gross disorder of rhythm and syntax. The patient speaks rapidly, his speech is jargon and prepositions, conjunctions, and articles tend to be omitted. Polysyllabic words are badly mispronounced.

4. *Semantic defects.*—There is a lack of recognition of the full significance of words and phrases apart from their immediate meaning. There is a "loss of memory for words." The patient can utter words, even in syntactic order, but he does not apprehend their significance.

This classification of Head is one of the latest to appear in the explanation of the interesting condition of aphasia and probably the most acceptable with the least chance for disagreement.

From cases cited in his work on this problem, Head has attempted to localize lesions giving these four types of aphasia. He stresses the fact that in "attempts to correlate site of structural change with defects of function, it must never be forgotten that the severity and acuteness of the lesion exert an overwhelming effect on the manifestations." Speech does not arise in any of the "centers" of the brain. It is a result of higher intellectual activity of which we have little concept. No function is "localized" strictly in any part of the cortex, and the destruction of this part of the cortex does not abolish the function. A destructive lesion in one of these "centers" throws a highly organized function into disorder. The function is hindered or blocked and a new adjustment occurs, which results in what we call the abnormal response, in our case, *aphasia*.

Now, Head, from clinical data, has localized, more or less, these points of hindrance which give the abnormal responses, or types of aphasia, which he has classified. He agrees that the speech zone is on the left side of the brain in right-handed individuals. The more definitely the injury destroys the lower portion of the pre- and post-central convolutions and the parts beneath them, the greater the probability that the speech defect will be of the "verbal type." A lesion in the upper convolutions of the temporal lobe will tend to result in the disorders of the "syntactical type." Disorders occurring in the

supra-marginal gyrus result in the "semantic" aphasia. Lesions in and around the angular gyrus and posteriorly are associated with "nominal aphasia."

The recently deceased Theodore H. Weisenburg, in an extensive survey of the cases of aphasia in Philadelphia, reached some interesting conclusions. Although he does not disagree with Head's classification cited above, he offers a somewhat simpler and possibly a more easily applicable classification.

He divides aphasia into (1) expressive, (2) receptive, and (3) expressive-receptive. By expressive aphasia is meant those disturbances of speech or writing in which the expression is at fault. This can be further subdivided into defects in articulation; and amnesic aphasia, in which there is difficulty in evoking words such as names for objects, things, persons, etc. Receptive aphasia, as the name implies, merely implies a difficulty in understanding or a lack of recognition of words and phrases, or of objects. Expressive-receptive aphasia is a combination of the two conditions.

Like Head, Weisenburg speaks of localization merely in generalities. He agrees that aphasia is associated with lesions on the left side of the brain in right-handed individuals, but does not describe a circumscribed speech center. Expressive aphasia occurs in lesions of the anterior part of the brain. Receptive aphasia is associated with lesions in the anterior portions but there also is quite likely to be lesions further posterior, i.e., in the parietal and temporal regions. Expressive-receptive defects naturally are associated with combinations of lesions or in the fibers between them. Weisenburg closes his studies with the idea that speech, written or oral, is a psychic process and a product of the activity of the brain as a whole, and localization, although fascinating, is not accurately possible.

In sixty cases of aphasia, Weisenburg found twenty-six cases of expressive aphasia, seventeen of receptive aphasia, twelve of the expressive-receptive type, and five of the amnesic variety.

Recently, in our Neurology service, we encountered a case which brought home to us the hopelessness of attempting to clarify the entire problem of aphasia, and, because he presented a rather rare clinical picture, we decided to present his case in full.

W. G., a right-handed, white man, aged forty-seven was admitted to the neurology service of the Seymour Hospital, Eloise, Michigan, on March 5, 1935, by transfer from the Detroit Receiving Hospital. His transfer diagnosis was "cerebro-vascular accident." The physical findings as described on the transfer record were "weakness of right side." On admission to our hospital, he gave a history of a "stroke" on January 31, 1935, followed by a period of three weeks for which he had no remembrance. When he regained consciousness he had a weakness of the left side and was "muddled" mentally. Since that time he felt that he had improved. He spoke with a fair amount of coördination but he frequently interjected words which had no definite place in the sentence as stated. When viewing an object he was not able to tell the name of it although he knew its use and could employ it. He frequently called an object by its wrong name, and when told the name of the object he would use that name to designate some new object when it was shown to him. He realized that he was making these errors but could not rectify himself. He had no similar difficulty in repeating simple phrases or reading them. He could recognize colors and name them. Likewise, he had no difficulty in recognizing and naming numbers.

It was quite significant that when shown a playing card which he was using at the time the examiner approached him, he could not name the object he was holding. However, when he was asked, "What are you doing?" he readily replied, "Playing cards." Immediately after this, the card was pointed out to him and the question, "What is this?" asked, and the reply was, "I know what it is but I can't say it."

In naming other subjects similarly familiar to the patient, like experiences were encountered. A fountain pen was shown to the patient on numerous occasions and after much hesitation each time, he would call it a "hand lathe," and, then immediately say, "No, it isn't a hand lathe; you write with it, but I can't remember its name." Likewise he could not name a safety pin, shoes, bed, and numerous other objects.

The tests suggested by Head were used in this case to determine the degree of disturbance. Particularly enough, although he had such intense difficulty in naming familiar objects, he had no trouble in naming and recognizing colors. In attempting to repeat after the examiner the phrase, "The man, the dog, and the cat," he repeatedly said, "The man, the dog, and the mat" instead. He had no difficulty in telling the correct time on the clock, nor in placing the hands at any named hour. He could place his finger to various parts of his body at the command of the examiner, but had slight difficulty in naming the parts when they were pointed out to him, but this manifested itself only in hesitancy which he overcame by care. He wrote and repeated the alphabet with ease, and he wrote and recognized numbers rapidly. Likewise, his attempt at spontaneous drawing of named objects or copying of simple figures were quite within the range of normal. The past history of the patient revealed a right-sided cerebral hemorrhage two and a half years prior to the present illness unassociated with the aphasia, but there had been some residual weakness on the left side which the recent stroke had exaggerated.

The physical examination revealed a well-nourished and well developed white man, not acutely ill. There was a facial weakness on the left. Pupils reacted to light and accommodation. The fundus

revealed segmental narrowing of the arterioles with an arteriosclerosis grade III. The ears, nose, and throat were essentially negative. Lung fields were clear and resonant. The heart was enlarged to the left and downward. There were no murmurs but the second aortic sound was accentuated. Blood pressure, 190/100. Examination of the abdomen gave negative findings. Rectal and genitalia examination revealed no pathology.

Neurologically, he presented grossly the findings of a right intracranial accident with hyperactive reflexes on the left, and evidence of a right upper motor neurone lesion, characterized by a positive Hoffmann and Babinski on the left. There was a suggestion of a positive Babinski on the right which was not conclusive. There was no clonus.

Our conclusions were a right cerebral accident plus a nominal aphasia of Head, or, if one follows Weisenburg's teachings, an amnesic aphasia, but we are at a loss to explain a speech defect with a cerebral accident on the right side in a right-handed individual if we consider only one lesion.

There are several ways to explain this occurrence, none fully satisfactory.

1. The recent "stroke" occurred on the left side and all of our findings are those of the previous accident. In doing this we disregard the patient's story that upon recovering consciousness there was a definite weakness on the left which was not present prior to the recent accident. In doing this we accept the transfer record of "weakness on the right side" which we could not find.

2. This patient might have the rather rare condition of uncrossed pyramidal tracts giving him a left hemiplegia plus aphasia.

3. It appears to us that probably the best explanation for the condition is that the patient demonstrates how vague is our knowledge of the exact nature and anatomical location of lesions causing aphasia. It is not beyond the realm of reason, in fact, it appears quite plausible to us, that this patient could have a lesion on the left side of the brain sufficient to give him his aphasic symptoms concomitant with his accident on the right side which resulted in a hemiplegia. The left sided accident could be quite minute and result in his very limited and unusual type of aphasia. Physiologically, one could postulate a right-sided thrombosis resulting in a previously diseased vessel when the blood pressure fell as a result of a left-sided hemorrhage, or merely an exudation through the cerebral vessels which was more profuse on one side than on the other.

But to name any definite site is useless and impossible. It suffices to say that because of a vascular accident, probably on the left side of the brain, our patient had a disorganization in his domain of speech, which manifested itself in a nominal or amnesic aphasia.

Bibliography

- Head, Henry: *Aphasia and Kindred Disorders of Speech*. MacMillan Co., 1926.
 Wilson, S. A. Kinner: *Aphasia*. Oxford Medicine, Oxford U. Press, N. Y., 1932.
 Lowell, Harold W., Waggner, Raymond W., and Kahn, Edgar A.: Critical study of a case of aphasia. *Am. Jour. Neurol. and Psych.*, p. 1178, (November) 1932.
 Zaeker, Konrad: An analysis of disturbed function in aphasia. *Brain*, 57:109, (June) 1934.
 Weisenburg, T. H.: A study of aphasia. The Charles K. Mills Memorial Lecture. *Arch. Neurol. and Psych.*, 31:1-33, (January) 1934.

THE PATHOGENESIS AND TREATMENT OF SUBCUTANEOUS EDEMA*

GORDON B. MYERS, M.D.†
 DETROIT, MICHIGAN

EXTENSIVE clinical investigation during the past few years has confirmed and elaborated upon Starling's concept of the pathogenesis of edema.³⁰ It is my purpose to review the recent advances in this field^{3,5,9,16,26} with particular reference to their practical application in the diagnosis and treatment of edema.

Formation of Tissue Fluids in the Normal Individual

The normal capillary wall is impermeable to plasma protein and, as a consequence, tissue fluids are practically protein-free.¹⁰ On the other hand, it permits water and salts to pass freely from the capillaries into the tissue spaces or from the tissues back into the capillaries. The direction actually taken depends largely upon the balance between two forces: (1) the capillary blood pressure which tends to drive water and salts out into the tissues, (2) the hydrophilic power of serum protein (oncotic or colloidal osmotic pressure‡), which tends to draw them back into the capillaries.

Accurate measurements of capillary blood pressure have been made by inserting a minute cannula with manometer attachment into a nail bed capillary with the aid of a microscope.¹⁹ The average pressure at the arterial end of the capillary is 32 mm. Hg., and at the venous end 12 mm. Hg. The oncotic pressure exerted by 1 gm. of albumin per 100 c.c. is 5.5 mm. Hg. and that of 1 gm. of globulin per 100 c.c. is 1.4 mm. Hg.¹¹ Since normal blood plasma contains an average of 4.5 per cent albumin and 2 per cent globulin,^{25,27,34} its oncotic pressure is approximately 27.5 mm. Hg.

At the arterial end of the capillary, blood pressure (32 mm.) exceeds oncotic pressure

(27.5 mm.) and as a consequence water and crystalloids are forced out into the tissues. At the venous end, oncotic pressure (27.5 mm.) normally exceeds blood pressure (12 mm.), hence water and crystalloids are drawn back into the blood stream. As long as such a balance in pressure exists, absorption of tissue fluids keeps pace with their formation and edema does not occur.

Pathogenesis of Edema—Physiological Aspects

If the blood pressure at the venous end of the capillary is raised or the oncotic pressure lowered sufficiently to reverse their normal relationship, tissue fluid will be formed instead of absorbed at the venous end of the capillary. When sufficient fluid has accumulated in the tissue spaces to produce a swelling that pits upon pressure, edema becomes manifest clinically. According to its pathogenesis, edema may be divided into two types:

1. *Edema due to rise in venous pressure.* Interference with the venous circulation, as in cardiac decompensation and thrombophlebitis, leads to an increase in pressure in all distal veins and capillaries. If the blood pressure at the venous end of the capillary rises above the oncotic pressure, edema develops.

*From the Department of Internal Medicine of Wayne University.

†Dr. Myers was graduated from the University of Michigan in 1927. He is an assistant professor of clinical medicine at Wayne University.

‡The term, oncotic pressure, is used as a synonym of colloidal osmotic pressure and is merely an expression of the affinity of colloids for water.

2. *Edema due to fall in effective oncotic pressure.* The effective oncotic pressure is represented by the difference in osmotic pressure of the plasma and tissue fluid proteins. Normally, the tissue fluid protein is negligible, consequently the effective oncotic pressure is practically the same as the actual pressure of the plasma proteins, which averages 27.5 mm. Hg. Approximately 90 per cent of this figure is due to the albumin fraction and only 10 per cent to globulin. When the capillary wall is damaged, it becomes permeable to protein. The albumin molecule is smaller and passes into the tissue spaces more readily than globulin. Thus, marked changes in effective oncotic pressure are usually due to changes in the albumin fraction of the plasma or tissue fluid.

(a) *Edema due to fall in plasma albumin.* This is usually the result of an inadequate diet or an excessive albuminuria. Whenever the plasma albumin is below 2.5 per cent, edema is generally present.

(b) *Edema due to escape of albumin into the tissue fluids.* This is usually due to capillary damage. In lymphatic obstruction, a comparable situation arises from the damming back of albumin-rich lymph into the tissue spaces. The osmotic pressure of the tissue fluid albumin opposes that of the plasma protein. If the tissue fluids contain more than 2 per cent albumin, the effective plasma oncotic pressure is reduced sufficiently to permit edema.

Rate of accumulation of edema. A reversal in pressure relationships in the venous loop of the capillary is largely responsible for the development of edema. The amount accumulating and the rapidity of formation are affected by at least six other factors.

(a) *The salt intake* is the most important of these.^{8,28} Whenever reversed pressure relationships are established, most of the ingested salt is forced out into the tissues along with enough water to form a fluid approximating Ringer's solution. Since the average diet contains 5 to 15 gm. of salt daily, as much as 0.5 to 1.5 liters of edema fluid may accumulate daily if restrictions are not imposed. The hydropigenic constituent of salt is the sodium, not the chloride ion, as shown by the fact that other sodium compounds such as the bromide¹³ and bicarbonate¹⁴ will increase edema, whereas certain chlorides, such as potassium and ammonium chlorides, are valuable diuretics.

(b) *Reaction of the dietary ash.* A basic ash favors water retention whereas an acid ash promotes diuresis. In edematous nephritics who were gaining weight steadily on a basic ash diet, diuresis could be induced merely by acidifying the diet with dilute hydrochloric acid.²²

(c) *Posture.* The more dependent the part, the greater the hydrostatic pressure at the venous end of the capillaries and the more rapid the accumulation of edema. Posture influences the distribution of all types of edema, but in particular that occurring in cardiac decompensation.

(d) *Tissue pressure.* Edema has a predilection for loose tissues, such as the face and eyelids and is slight or absent where the skin is tightly adherent, as in the palms and soles. As edema increases, tissue pressure rises. Since tissue pressure opposes capillary blood pressure, the rate at which edema accumulates is inversely proportional to the amount already present.²⁰

(e) *Temperature.* The rate of formation of edema is directly proportional to the temperature of the part.²⁰

(f) *Lymphatic obstruction* blocks one of the two avenues for the removal of tissue fluid. Because of high albumin content of the fluid dammed back from the lymph vessels into the tissue spaces, the effective osmotic pressure of the plasma proteins is reduced and the edema cannot be completely absorbed into the capillaries.

Pathogenesis of Edema—Clinical Aspects

In Table I, the various clinical types of edema have been classified into a group principally due to rise in venous pressure and into a group chiefly due to fall in oncotic pressure, either from depletion of plasma albumin or from escape of albumin into the tissues. Edema is not always due to a single factor. The most important conditions in which more than one factor enters into the production of the edema will be briefly discussed.

Whereas a rise in venous pressure is largely responsible for the edema in cardiac failure, increased capillary permeability from anoxemia and fall in plasma albumin as a result of albuminuria, anorexia or an ill advised low protein diet may contribute towards it.

In nephritics, all three types of edema may be observed. At the onset, the edema is

TABLE I. PATHOGENESIS OF EDEMA

- I. Increased venous pressure
 - A. Cardiac decompensation
 - B. Local venous stasis
 1. Varicose veins
 2. Thrombophlebitis
 3. Obstruction from external pressure (as from pelvic tumors, etc.)
- II. Lowering in effective oncotic pressure
 - A. Fall in plasma albumin
 1. Inadequate protein intake (nutritional edema)
 - a. Improper diet (war edema, beriberi, etc.)
 - b. Anorexia (cachectic states, etc.)
 - c. Defective absorption (chronic diarrhea)
 2. Impaired formation of plasma albumin
 - a. Diffuse liver damage (cirrhosis)
 3. Excessive loss of albumin from body
 - a. In urine (nephrotic edema)
 - (1) Subacute glomerulonephritis (nephrotic stage)
 - (2) Lipoid nephrosis
 - (3) Amyloid kidney
 - b. Through excessive effusion into serous cavities and through profuse suppuration
 - B. Escape of albumin into the tissue fluids
 1. Capillary damage
 - a. Diffuse
 - (1) Bacterial toxins—(acute nephritis)
 - (2) Allergens (angioneurotic edema)
 - (3) Certain drugs—(uranium nitrate, paraphenyldiamine)
 - b. Local
 - (1) Inflammation
 - (2) Insect bites
 2. Lymphatic obstruction

due to a widespread capillary damage.* Edema of this type is transient in duration. When edema persists over a long period of time, depletion of serum albumin is generally responsible. In late stages, cardiac failure may supervene.

Peripheral edema in cirrhosis is due partly to stasis in the inferior vena cava resulting from increased intra-abdominal pressure, partly to fall in serum albumin. Whereas anorexia and loss of albumin in the ascitic fluid contribute towards the latter, the failure of some cases to respond to a high protein diet would suggest that impaired formation of plasma albumin is an important factor.^{18,24}

The edema which accompanies anemia is usually traceable to fall in serum albumin, to venous thrombosis or to heart failure. A fall in hemoglobin or red cells in the absence of these factors is not associated with edema.¹⁷

*The theory that nephritic edema is due to retention of salt and water is not borne out by clinical and experimental observations. Retention of salt and water in acute nephritis has not been conclusively demonstrated. Bilaterally nephrectomized animals, in whom a maximal salt and water retention would be expected, do not develop edema unless they are given large amounts of saline.

Diagnosis

Congestive heart failure is usually easily recognized by the dependent edema, enlarged liver, engorged cervical veins, pulmonary congestion and cardiac changes. Edema from local venous stasis is likewise readily detected by its asymmetrical distribution and by the changes in the veins.

The most frequent diagnostic error lies in the failure to recognize the part played by reduction in plasma albumin. This is almost always a factor in chronic edema in which the face is involved in addition to the dependent parts. Even though the face is unaffected, the dietary history of all chronic cases should be investigated, and the loss of protein in the urine and body fluids evaluated. Whenever possible, a serum albumin determination should be made. If this is below 2.5 per cent, it is certainly an important, if not the sole, cause of the edema. If it is between 2.5 per cent and 3 per cent, it is probably a contributory factor. Unless the part played by fall in serum albumin is appreciated and an adequate protein intake assured, therapeutic results will usually be disappointing.

The clinical forms of edema arising from increased capillary permeability are usually easy to recognize. Suddenly appearing circumscribed areas of subcutaneous swelling with urticaria are characteristic of angioneurotic edema. An acute diffuse edema, most marked in the face and eyelids, should suggest an acute nephritis, which may be verified by urine examinations, blood pressure and blood urea determinations. In case the urine is negative, trichiniasis should be considered and a blood smear examined for eosinophilia. Inflammatory edema secondary to local infection is seldom, if ever, difficult to recognize. Lymphatic obstruction is revealed by the brawny skin induration.

Treatment

The following outline of treatment is recommended for edema due to rise in venous pressure or fall in serum albumin.†

- A. Rest in bed is indicated as long as there is gross edema.

†Edema due to increased capillary permeability requires specialized treatment depending on the cause. Angioneurotic edema is relieved by adrenalin. Afterwards the causative allergen must be searched for and eliminated. Inflammatory edema requires local heat and drainage. In acute nephritis the most important measures are rest and drastic salt restriction.

B. Diet:

1. *A high caloric intake* is desirable to combat undernutrition. When the appetite is poor, frequent feedings of concentrated foodstuffs may be necessary.
2. *A high protein diet* is indicated whenever plasma albumin is lowered. The maximum amount that the average person will tolerate is 100 to 120 grams daily. This is provided for by including a pound of meat or fish in the menu.
3. *An acid ash* promotes diuresis. Meat, eggs and cereals leave an acid ash whereas fruits and vegetables are basic. A high protein diet will thus leave an acid ash unless large amounts of fruit and vegetables are included.
4. *Salt restriction* is the most important part of the diet. When conditions favorable to the development of edema have been established, the amount accumulating depends upon the intake of sodium. For this reason, medication containing sodium should be avoided and the salt intake should be reduced to a minimum. Since most raw foods are salt-poor, a satisfactory diet for edematous subjects may be prepared in the home by observing the following precautions: (a) add no salt during cooking or at the table; (b) avoid salted preserved meats and fish, sausage, meat extracts and sauces, cheese and salted crackers; (c) use salt-free bread and butter (salt may be removed from ordinary butter by melting in boiling water, then resolidifying); (d) do not use milk as a beverage. Such a diet should contain between one and two grams of salt daily. Spices may be used liberally to make the diet more palatable. Potassium chloride has proved to be a good salt substitute and an effective diuretic when supplied in a salt shaker with instructions to season the food to taste, using a total of five grams daily.¹
5. *Moderate fluid restriction.* As long as the diet is salt-free and leaves an acid ash, fluids may be forced without increasing edema.²² The excess

water is eliminated through the lungs and skin. Since an absolutely salt-free diet is not practical clinically, moderate fluid restriction (i.e., to 1500 c.c. daily) is advisable while edema lasts.

- C. *Digitalization* is indicated whenever congestive heart failure contributes towards the edema.

D. *Removal of accumulated fluid.*

1. *Through kidney*—by diuresis. The only important contraindication to the diuretics as a group is renal insufficiency, which leads to drug retention and poisoning. The simplest and one of the most delicate tests of renal function is the specific gravity of the urine. If the patient can put out a sugar-free urine with a specific gravity above 1.020, any of the following diuretics may be tried:
 - a. *The acid forming salts*,² particularly ammonium chloride and nitrate, should, as a general rule, be tried first. The usual dose of either drug is 30 to 50 grains t.i.d. p. c. In the event that the taste of the aqueous solution is objectionable, the drugs may be prescribed in capsules. The nitrate is less likely to produce nausea, vomiting and acidosis but, on the other hand, occasionally causes cyanosis through conversion of hemoglobin to methemoglobin.^{7,31} The cyanosis promptly clears up after the withdrawal of the drug. Furthermore, the nitrate may lose its diuretic effect when given over a period of time, due to depletion of plasma chlorides. When ammonium salts must be given over a long period, it is best to alternate the nitrate and chloride. Acidosis should be watched for and the renal function checked at intervals.
 - b. *Salyrgan*, an organic mercurial, is indicated on the third morning of treatment, if a satisfactory diuresis was not produced by the ammonium salts and other measures instituted during the first two days. It is given intra-

- venously (never subcutaneously because of slough formation), the initial dose being 0.5 c.c. It may be repeated once or twice weekly in doses of 1 or 2 c.c. as long as renal function is intact and hematuria is not produced. For maximal results an ammonium salt should be given for two days prior to each injection. Salyrgan has been given in this manner over long periods of time without demonstrable ill effects.^{29,32} In the presence of renal insufficiency, however, mercurial poisoning with its usual manifestations (oliguria, stomatitis, colitis) is likely to occur.
- c. *Xanthine* diuretics may be used for two days prior to salyrgan, in place of or together with an ammonium salt.¹⁵ The urinary output when the drugs are given in this manner is greater than the summation effect when used independently. The xanthine diuretics are valuable in cardiac edema but are often ineffective in other forms. The best diuretic of this group is theocin, which is given in five grain doses after breakfast and after the noon meal for a period of two or three days. The diuresis will thus occur in the afternoon and evening and will not interfere with the patient's sleep. By giving the drug p.c. the incidence of nausea and vomiting is minimized. If a gastric upset does occur, aminophyllin (3 grains), theobromine sodium salicylate (10 grains) or phyllicin (4 to 8 grains) may be substituted. These drugs are closely related chemically to theocin, are less irritant to the stomach, but also are generally less effective.
 - d. *Urea*. Since there is a limit to the concentrating ability of the kidneys, the greater the quantity of urea excreted, the larger the volume output of urine. A dose of 50 to 100 grams of urea daily is necessary to produce a satisfactory diuresis. However, urea may actually increase edema, for, like salt, it is freely diffusible into the tissues. Furthermore, it is unpleasant to take, even when iced and flavored with lemon.
 2. *Mechanical removal of fluid*. Hydrothorax is seldom completely absorbed and should be removed as early as possible by thoracentesis. Massive ascites interferes with renal function through pressure on the renal veins and therefore should be evacuated. Small collections of ascitic fluid generally respond to diuretics. Peripheral edema should not be removed mechanically unless all other measures fail, because of the danger of cellulitis.
 3. *Elimination of fluid through the bowel and skin*. Purgation and sweating, when vigorous enough to eliminate considerable fluid, are poorly tolerated by the patient.
- E. *Methods of increasing plasma oncotic pressure*.
1. *High protein diet*.
 2. *Thyroid extract* is at times helpful in the removal of nephrotic edema⁸ but is contraindicated in cardiac decompensation. A rise in plasma oncotic pressure has been observed following thyroid therapy.²³ The initial dose is $\frac{1}{2}$ to 1 grain t.i.d., which may be stepped up rapidly as long as symptoms of thyrotoxicosis do not appear. As much as 15 to 30 grains daily has been given without untoward effect.
 3. *Acacia*. Frequent intravenous injections of acacia have been used in stubborn cases of nephrotic edema in an attempt to raise plasma oncotic pressure.¹² Recent work⁴ has shown that reduction of edema by acacia is only transient and that the ultimate effects are undesirable. With continued injections there is a marked enlargement of the liver and a pronounced fall in plasma albumin.
 4. *Blood transfusions* are occasionally followed by appreciable rise in plasma oncotic pressure and disappearance of edema.²¹

5. *Reinjection of protein derived from body fluids.* Considerable protein is lost in the fluids removed by paracentesis. It would seem logical to collect these fluids under sterile precautions, reduce their volume in a desiccator and reinject them intravenously.

Bibliography

1. Barker, M. H.: Jour. A. M. A., 98:2193, 1932.
2. Binger, M. W., and Keith, N. M.: Jour. A. M. A., 101:2009, 1931.
3. Christian, H. A.: Jour. A. M. A., 97:296, 1931.
3. Christian, H. A.: New England Jour. Med., 209:1267, 1933.
4. Dick, M. W., Warmeg, E., and Andersch, M.: Jour. A. M. A., 105:654, 1935.
5. Elliott, C. A.: Ann. Int. Med., 7:240, 1933.
6. Epstein, A. A.: Jour. A. M. A., 87:913, 1926.
7. Eusterman, G. B., and Keith, N. M.: Med. Clin. N. Amer., 12:1489, 1929.
8. Fahr, G., Kerkhof, A., and Giere, E.: Proc. Soc. Exp. Biol. and Med., 29:335, 1931.
9. Fishberg, A. M.: Hypertension and Nephritis. Lea and Febiger, 1931. Chapter 4.
10. Gilligan, D. R., Volk, M. C., and Blumgart, H. L.: Jour. Clin. Invest., 13:365, 1934.
11. Govaerts, P.: Compt. rend. soc. d. biol., 93:441, 1925.
12. Hartmann, A. F., Senn, M. J. E., Nelson, M. V., and Perley, A. M.: Jour. A. M. A., 100:251, 1933.
13. Hastings, A. B., and Van Dyke, H. B.: Jour. Biol. Chem., 78:35, 1928.
14. Hastings, A. B., Liu, S. H., and Dievaide, F. R.: Jour. Clin. Invest., 10:683, 1931.
15. Herrmann, G., Schwab, E. H., Stone, C. T., and Marr, W. L.: Jour. Lab. & Clin. Med., 18:902, 1933.
16. Keefer, C. S.: Internat. Clin., 2:85, 1933.
17. Keefer, C. S., and Myers, W. K.: Trans. Assoc. Am. Physicians, 47:231, 1932.
18. Kerr, W. J., Hurwitz, S. H., and Whipple, G. H.: Am. Jour. Physiol., 47:356, 370 and 379, 1918-19.
19. Landis, E. M.: Heart, 15:209, 1929-31.
20. Landis, E. M., and Gibbon, J. H.: Jour. Clin. Invest., 12:205, 1933.
21. Landis, E. M., and Leopold, S. S.: Jour. A. M. A., 94:1378, 1930.
22. Lashmet, F. H.: Jour. A. M. A., 97:918, 1931.
23. Malken, S. J.: Klin. Wchn., 9:551, 1930.
24. Myers, W. K., and Keefer, C. S.: Arch. Int. Med., 55:349, 1935.
25. Peters, J. P., and Eisenman, A. J.: Am. Jour. Med. Sc., 186:808, 1933.
26. Peters, J. P., and Van Slyke, D. D.: Quantitative Clinical Chemistry, Williams and Wilkins Co., 1931, Vol. I, Chapter XIII.
27. Salvesen, H. A.: Acta Med. Scand., 65:147, 1926.
28. Shelburne, S. A., and Egloff, W. C.: Arch. Int. Med., 48:51, 1931.
29. Smith, C.: Jour. A. M. A., 102:532, 1934.
30. Starling, E. H.: Jour. Physiol., 19:312, 1895-6.
31. Tarr, L.: Arch. Int. Med., 51:38, 1933.
32. Tarr, L., and Jacobson, S.: Arch. Int. Med., 50:158, 1932.
33. Weech, A. A., and Ling, S. M.: Jour. Clin. Invest., 10:869, 1931.
34. Wiener, H. J., and Wiener, R. E.: Arch. Int. Med., 46:236, 1930.

CANCER SURVEY OF MICHIGAN*

Made by

FRANK LESLIE RECTOR, M.D.†

Cancer Statistics.—There are fairly comparable statistics of cancer mortality influenced, as are all other vital statistics, by the accuracy with which the cause of death has been determined and the statistical facts interpreted. Mortality figures alone are of little value in discovering the frequency and distribution of the disease or in planning a prevention and control program.

Morbidity figures are needed to give a picture of cancer at a time most hopeful for cure and control. Such statistics in general are wanting, in spite of the fact that at the present time cancer is a reportable disease in eleven states. Such figures are needed to check death certificates, to stimulate earlier diagnosis, to evaluate therapeutic methods, and to augment clinical knowledge of the disease.

There might well be associated with the collection of morbidity statistics the assembling of similar information as to results of treatment. Inasmuch as but three methods of treatment are now recognized, viz., surgery, roentgen ray, and radium, it should be a comparatively easy undertaking to ob-

tain fairly accurate statistics on treatment from those institutions seeing the largest number of cancer patients.

Dr. Gösta Forssell‡ has said:

"In my opinion, the introduction of a means for controlling treatment in the form of obligatory statistics as to the result of treatment is much more important than are statistics as to mortality and morbidity. The elaboration of present methods of cancer treatment and their further development depend on the availability, for practitioners and medical authorities, of trustworthy statistics as to the results of therapeutic means now in use. Such statistics are also necessary for estimating the efficiency of new forms of therapy."

For some reason the collection of morbidity statistics has been ignored by the agencies most concerned in this work. A few hospitals are specializing in cancer treatment and it is from these that available statistics are being received. As one essential of acceptable tumor clinics, now being organized in general hospitals, is the keeping of accurate and adequate records, it is expected that soon a considerable body of information from this source will be available on cancer morbidity and therapy. However, it will be necessary to increase the sources of this information much beyond

*Continued from March, 1936, issue.

†Field Representative, American Society for the Control of Cancer, New York, N. Y., Clarence Cook Little, Sc.D., Managing Director.

‡American Journal of Cancer, v. 20, No. 4, p. 854, April, 1934.

their present number and scope before their value will in any way approach that of other diseases.

In the absence of definitely known etiological factors, the most promising attack on cancer is through the collection and analysis of all possible information bearing on it. Hospitals and physicians in private practice should take full advantage of their opportunities to record in detail the factors, both primary and collateral, that relate to their cancer patients.

Organized Cancer Service

Surveys made by the American Society for the Control of Cancer have shown that the average general hospital does not have, nor can it be expected to have, adequate facilities for the diagnosis and treatment of all types of malignant diseases. The small number, 2 to 3 per cent, of such patients cared for, the cost of necessary equipment, especially deep therapy and radium, the absence of staff members with training and experience to insure competency in diagnosis and treatment, all suggest that the hope for an improved service to these patients rests in the development of adequate facilities in a few institutions where satisfactory work can be done.

In coöperation with the American Society for the Control of Cancer, the American College of Surgeons, through its Committee on the Treatment of Malignant Diseases, has outlined the following types of institutions for the treatment of cancer:

1. Cancer institutes
2. Cancer hospitals
3. Cancer clinics in general hospitals
 - a. Complete cancer clinics
 - b. Diagnostic cancer clinics

The quotations that follow, unless otherwise noted, are taken from the pamphlet of the American College of Surgeons entitled "Organization of Service for the Diagnosis and Treatment of Cancer," June, 1931.

Cancer Institutes.—"A cancer institute is an organization equipped with hospitals and laboratories especially organized and conducted for carrying on research in relation to the nature of cancer and its diagnosis and treatment, as well as for the clinical diagnosis and treatment of actual cancer cases. . . . Institutes of this nature require very considerable endowment or such generous annual appropriations as can be obtained usually only from the state or national government. They are undoubtedly the most effective method of dealing with the cancer problem, but their cost is such that their number will inevitably be somewhat restricted."

Cancer Hospitals.—"Cancer hospitals are devoted exclusively to the diagnosis of cancer and allied diseases. They differ from cancer institutes in that major emphasis is placed on clinical work rather than on research. At this time not more than twelve such hospitals are found in this country.

"Such organizations require very considerable financial support either by endowment or by annual appropriation. Hospitals of this nature may be supported by the state departments of public health, as in Massachusetts; by state universities, as in the Cancer Institute of the University of Minnesota; or partly by endowment and partly by annual subscription, as in the case of those organized under private enterprise. Institutions of this nature are coming into existence as special departments of existing hospitals in many places."

Cancer Clinics in General Hospitals.—"Where funds sufficient for the maintenance of cancer institutes, research laboratories, or special cancer hospitals are not available, the demand for improved service for cancer cases has resulted in the organization of special cancer clinics in existing general hospitals and of cancer diagnostic clinics in many places in the country in the past few years. The reason for the organization of these special cancer clinics is primarily the fact that the field of cancer diagnosis and cancer treatment has developed so widely in the past few years that only by the organization of a group of representatives of the different departments of the hospital can the full resources available at the present day for the treatment of cancer be made accessible to the individual patient. Many general hospitals are equipped with the material and apparatus needed for the treatment of cancer, including high voltage x-ray and a sufficient amount of radium, but a separate organization is required to make this equipment available for the cancer patient and to secure the necessary consultation and coöperation from the different members of the hospital staff who are interested and competent in this field."

Cancer Diagnostic Clinics.—"Hospitals unable to meet fully the requirements for a cancer service, as outlined previously, but which have staff members interested in cancer and a laboratory with equipment and personnel to interpret the histological findings, may offer a cancer diagnostic service.

"Cancer diagnostic clinics may be organized in smaller communities where modern x-ray equipment and an adequate supply of radium is lacking. The object in establishing such a clinic is to provide better diagnoses upon cancer patients, to furnish a group judgment concerning the proper means of therapy to be employed, and to educate the medical public concerning this important group of diseases. Medical men in the community should be encouraged to bring patients to such a clinic, accompanied by a complete record of the history and physical examination. When a diagnosis shall have been reached and a line of treatment suggested, the surgeon or physician will be free to continue the care of his own patient as he may see fit."

Minimum Standard.—"The American College of Surgeons* has promulgated minimum standards for cancer clinics in general

*Surgery, Gynecology and Obstetrics, June, 1931. Also published as a separate pamphlet by the College of Surgeons.

hospitals. These standards can be put into effect in whole or in part as local conditions indicate. They are as follows:

"1. Organization.—There shall be a definite organization of the service, and it shall include an executive officer and representatives of all the departments of the hospital which are concerned in the diagnosis and treatment of cancer. The services of a secretary and of a social service worker shall be available.

"2. Conferences.—As an essential feature of the service there shall be regular conferences or consultations at which the diagnosis and treatment of the individual cases are discussed by all members of the clinic who are concerned with the case.

"3. Patients.—Reference to the cancer clinic of all patients in whom the diagnosis or treatment of cancer is to be considered shall be either voluntary or obligatory in accordance with the vote of the medical staff or of the governing board of the hospital.

"4. Equipment.—In addition to the diagnostic and therapeutic surgical equipment which is required in every approved general hospital there shall be available an apparatus for x-ray therapy of an effectiveness which is generally agreed upon as adequate, and an amount of radium sufficient to insure effective treatment.

"5. Records.—In addition to the records which are required in every approved hospital, there shall be additional records of:

"(a) The details of the history and of the examination for cancer in different regions of the body, such as are indicated on the form records which are recommended by The Committee on the Treatment of Malignant Diseases, American College of Surgeons.

"(b) The details of the treatment by radium or x-ray as indicated on the form records which are recommended by The Committee on the Treatment of Malignant Diseases, American College of Surgeons.

"(c) Periodic examinations at intervals for a period of at least five years following treatment.

"6. Treatment of cancer patients shall be entrusted to the members of the staff of the cancer clinic except in cases in which adequate treatment in accordance with the collective recommendation of the staff of the cancer clinic can be procured otherwise."

A discussion of some of the problems connected with an improved service for cancer patients, especially with some of the personnel problems involved, may be in order.

Pathologist.—While it does not come within the scope of this report to evaluate the ability of pathologists properly to interpret cancer tissues, it may be well to point out that special training and considerable experience are necessary to competency in this field. While the preparation and staining of tissue may be carried out by a technician, the best interests of the patient can be served only when the interpretation of that tissue is made by a physician with ade-

quate training and experience in this special field.

The preparation necessary for accurate interpretation of tumor tissue is much beyond that requisite for many other branches of clinical pathology, and the physician who equips himself for this form of medical practice should be granted better recognition in the staff organization than he now receives in many hospitals. As he is unable to share in fees collected by the surgeon and diagnostician, although a major responsibility for proper diagnosis and treatment often rests on him, he should receive remuneration in keeping with these responsibilities. The pathologist is one of the key men in an adequate diagnostic service, and men competent in this field cannot be expected to enter it unless their position is recognized and their remuneration more in keeping with their ability and responsibility than now prevails in many cases.

The pathologist, to be capable in the diagnosis of tumor tissue, must at times move out of the laboratory into the ward and operating room. He should see the patient at the bedside and have a voice in the decision on biopsy and where one should be taken if indicated. If biopsy is to follow exploratory incision, he should select the tissue for examination and by frozen sections tell the surgeon just what he is dealing with so that indicated procedures can be effectively carried out. Chemical analysis of secretions and excretions often throws much diagnostic light on the character of a tumor. The pathologist must be able to interpret the physiologic, chemical, physical and clinical observations in addition to the microscopic picture of the stained specimen. If he is confined to his laboratory seeing only such tissues as are submitted to him, he cannot do justice to his work or to the patient. His interpretations are all the more valuable when he has the added clinical experience and information that a consultation on these cases would give.

Dr. Shields Warren,* in discussing this subject, has said:

"The pathologist fills his position in the truest sense when he brings his special knowledge and experience to bear on the solution of clinical problems. The rapid growth in importance of the diagnosis and therapy of malignant disease offers exceptional opportunity to the pathologist. In his hand rests the diagnosis of early malignancy (and all too often late). His is the duty of estimating the prob-

*Bulletin, American Society for the Control of Cancer, v. 15, No. 11, p. 12, November, 1933.

able susceptibility of a tumor to radiation and of supplying the surgeon with information as to the probability and extent of metastasis. In the laboratory converge the streams of material from the various services, and this wealth of material, supplemented by observation of the patients themselves, endows the pathologist in a few years with a keen diagnostic sense. . . .

"The exceptional opportunity of the pathologist to correlate the gross and microscopic appearance of tumors, and the constant exercise of this opportunity required by the increasing use of immediate frozen section diagnosis, give him a definite advantage over the clinician in recognizing the various manifestations of neoplasms. The almost universal inclusion of the pathologist in tumor clinics is a recognition of this fact. His trained eye and hand can do much in guiding the clinician toward the correct diagnosis. The opportunity the pathologist has for checking up on the results of various types of treatment and for seeing at the autopsy table the distribution of various types of metastasis combine to make him a singularly well qualified consultant. Ewing has succinctly epitomized the ideal: 'The clinician may be permitted to err, but the tumor pathologist should charge himself with responsibility for faultless technic, prompt service, infallible care, and a percentage of error which approaches the vanishing point.'"

The attempt to develop a special cancer service in hospitals without laboratory equipment for tissue diagnosis and personnel to interpret such examinations would be a procedure of doubtful value. A false sense of security in the reliability of diagnostic procedures would be engendered that would make for delay in securing adequate treatment in many cases.

The qualifications for a clinical pathologist are defined by the American Medical Association* as

"One who is a graduate in medicine having had satisfactory training and experience in pathology, chemistry, bacteriology or other allied subjects for at least three years subsequent to graduation, who is in good standing and has been duly licensed to practice medicine.

"The pathologist shall be on a full or part time basis with a laboratory for the practical application of one or more of the fundamental sciences by the use of specialized apparatus, equipment and methods, for the purpose of ascertaining the presence, nature, source and progress of disease in the human body. He should devote the major part of his time to work in this field. . . .

"The pathologist may make diagnoses only when he is a licensed graduate of medicine, has had satisfactory training and experience in pathology

for at least three years subsequent to graduation from medical college, is reasonably familiar with the manifestations of disease, and is competent to make reliable reports."

Roentgenologist.—There is a wide difference of opinion among roentgenologists as to the optimum dosage of deep x-ray in cancer therapy. It is realized that this question is still undecided, but undoubtedly the trend is toward higher voltages and heavier filtration. The majority of hospitals devoted exclusively to cancer and allied diseases as well as the minimum standards of the American College of Surgeons for the treatment of malignant diseases, have set 200,000 volts as a minimum for acceptable deep therapy.

Of equal importance with installation of deep therapy equipment is the frequent calibration of tubes to see that the indicated voltage is being delivered. Such measuring devices should be attached at all times to such equipment; but where this is not feasible, the output of the tubes should be measured at frequent intervals.

Dangers to the patient arising from the use of this highly specialized form of therapy by physicians without adequate training in either the physics or the therapeutics of its application should be emphasized. A powerful force, about which much remains to be known, is brought into play when deep therapy treatments are given. Not only should the operator be thoroughly familiar with the general physical and therapeutic reactions of this force on the human system, but he should appreciate differences in reaction that take place in different individuals. The use of such equipment for additional revenue, without a thorough knowledge of its physiological effects, cannot be defended on any grounds of medical science. The patient's welfare must be held paramount to all other considerations entering into his treatment, and the use of x-ray therapy for any other purpose does much to discredit the legitimate use of this method in the hands of capable physicians.

(To be continued in May issue)

*Journal American Medical Association, v. 103, No. 16, p. 1230, October 20, 1934.

THE JOURNAL

OF THE

Michigan State Medical Society

PUBLICATION COMMITTEE

A. S. BRUNK, M.D., Chairman.....Detroit
 HOWARD H. CUMMINGS, M.D.....Ann Arbor
 J. EARL MCINTYRE, M.D.....Lansing

Editor

J. H. DEMPSTER, M.A., M.D.
 5761 Stanton Avenue, Detroit, Michigan

Medical Secretary

C. T. EKELUND, M.D.
 35 W. Huron Street, Pontiac, Michigan

Business Manager

Wm. J. BURNS, LL.B.
 2642 University Avenue, St. Paul, Minnesota
 or
 2020 Olds Tower, Lansing, Michigan

APRIL, 1936

*"Every man owes some of his time to the up-
 building of the profession to which he belongs."*

—THEODORE ROOSEVELT.

EDITORIAL

THE COLLEGE OF PHYSICIANS

The outstanding medical event in Michigan for the month of March was the twentieth annual convention of the American College of Physicians held in Detroit, March 2 to 6. This association of physicians has its counterpart in the American College of Surgeons. Both national organizations have shown wonderful results in the elevation of the standards of the practice of medicine and surgery in the United States. The College of Physicians is looking forward to establishing an examination board, the satisfactory passing of whose examinations will be evidence of qualification, for specialization in internal medicine. The Detroit meeting was a huge success from the viewpoint of the programs, interest and attendance. The membership was fairly representative of internists throughout the United States.

An outstanding feature of the week was the convocation oration on "The Rôle of Emotion in Disease," by Dr. Walter B. Cannon, professor of Physiology at Harvard University Medical School. Dr. Cannon went on to state that the past quarter of a century had witnessed what might be called the conquest of infectious disease. Such infectious diseases as typhoid and

diphtheria are almost under complete control. Tuberculosis has assumed a position of low in the roll of diseases that shorten life. The medical profession, however, was confronted with a new problem, namely, the relation of emotion to disease. The feeling of insecurity in an economic sense had produced in the minds of millions of men and women an attitude towards existence that was anything but beneficial to physical comfort and well-being. The speaker emphasized the importance of the physiological approach, the effect that emotions had upon the organs of the body. He spoke of the effects of fear and fright on secretions, and the influence of anxiety as a factor affecting disease. Here was a new field for physicians, namely, recognition of the psychic factor in disease. The cultists were able to secure large followings largely due to the fact that physicians were apt to dismiss patients in whom no actual organic lesion could be demonstrated. Dr. Cannon's address was in part a plea for greater attention on the part of physicians to the physiological approach to the subject of health. This should be preëminently the rôle of physicians, who alone are competent to make a complete and satisfactory physical examination.

Dr. James Alexander Miller, in his presidential address, emphasized the new trend in medical practice from curative to preventive medicine. The doctor must assume a position of leadership. We have heard this before; however, repetition will do no harm. There is ample evidence that this advice is being heeded here if we may judge from the activities of state and county medical societies in Michigan.

The American College of Physicians has afforded an opportunity not only to the Fellows of the College, but to the profession of the state as guests, to avail themselves of a short postgraduate course in clinical medicine.

The hospitality of Detroit and the County and State Medical Societies is assured the College when it may see fit to return.

A SUGGESTION

Dr. J. H. Miller, president of the American College of Physicians, in his presidential address before the Annual Convocation referred to the various "foundations."

He knew many of the founders and those associated with them and declared that they were splendid persons with a desire to do the right thing.

We would suggest then that, as disinterested persons, they use their wealth and influence to inform the laity regarding the merits of scientific medical care as may be rendered by graduates of our grade A medical schools, the schools sponsored by the state; teach them the danger of self-medication and the importance of accurate diagnosis before prescribing any treatment and also where competent medical care may be obtained. In other words, bring together the properly qualified physician and the patient requiring his services. Once this is accomplished, State or socialized medicine will seem a weak and ineffective remedy in the matter of distribution of medical care.

are usually solved by discussion with others. If each doctor who contemplates attendance on the post-graduate courses, announced in this JOURNAL from time to time, would write to the department of Post-graduate Medicine of the University stating the difficulty as specifically as possible, he would greatly aid the director and those in charge in devising a helpful program. He might also bring a list of his difficulties as suggested to the post-graduate conference. The object of the post-graduate department in medicine and the Michigan State Medical Society is to be as helpful as possible and to enable members who avail themselves of an opportunity offered to fit themselves to render the highest quality of medical care.

STATE MEDICINE CUTS NUMBER OF PHYSICIANS

WHAT ARE YOUR DIFFICULTIES?

The Michigan State Medical Society and the Post-Graduate Department in Medicine of the University of Michigan are busy with the next program of intensive post-graduate studies for the profession of their state. As we have already declared, the aim is to educate or to teach principles as far as possible in the brief space of time allotted to post-graduate work. It is needless to say the courses must also be practical.

In the writer's early years of practice, he often reflected what a wonderful opportunity it would be if one might return to medical college in the senior year and be permitted freely to present his difficulties for discussion. Every physician has his difficulties almost daily presented to him as problems. The textbook and the medical magazine serve a useful purpose but they are concerned of necessity with the generalities rather than specific instances.

Here is a suggestion. When you attend these conferences, bring along with you a number of actual problems which have perplexed you. Write them down when they present themselves. If it is concerning a fracture, bring along the x-ray films; if a chest in which there is difficulty in determining the pathologic change or the course of treatment to pursue, x-ray films again will constitute a valuable basis of discussion. No matter what phase of practice one is particularly interested in, difficulties arise that

We have expressed the belief that the complete socialization of medicine would result in the elimination of many members from the medical profession. In state controlled medicine as it prevails in state mental hospitals and in institutions for the care of infectious disease, the number of doctors employed is fairly defined and limited. If the principle were made to include employed persons and their dependents fewer physicians than now are licensed would be required since they would be organized about hospitals or central state controlled clinics. We have no accurate knowledge regarding what this decrease would be. However, a survey has been made in Canada from the viewpoint of overcrowding of the professions. The *Nova Scotia Medical Bulletin* comments on the survey which was discussed in an article in the *Toronto Saturday Night* of January 4.

"He [K. T. Cox, the author of the paper mentioned] shows that the overcrowding in Medicine has produced a decline in the doctors of Canada during the last ten years of 3 per cent from ninety-nine per 100,000 to ninety-six per 100,000, while in the U. S. A. the situation is even worse. On the basis of this, and estimating the needs for—(a) The replacement of the wear and tear among medical men, and (b) The increase due to growth of population, it is calculated that during the next ten years we shall require twenty-eight hundred new doctors. A survey shows three thousand students in our Medical Schools today, which, with generous allowances for 'flunking,' etc., will give us four thousand new doctors in ten years—twelve hundred too many, an excess of one hundred and twenty a year.

"But the part of the survey that is most important at the moment is his consideration of how that

excess would be taken care of by State Medicine. He shows that in Saskatchewan centers where this has been tried it has been found that *one doctor can handle two to three thousand people and he concluded that if this form of State Medicine is adopted for Canada, on the basis of one doctor for every two thousand of population, we should need only five thousand doctors where today we have ten thousand! This obviously provides a situation which will need adjusting and which will be difficult of adjustment under our present system.*" (Italics ours.)

On the basis of one doctor to 2,000 population the medical needs of the United States can be cared for by 50,000 instead of approximately 100,000 physicians as at present.

What member of the medical profession can afford to supinely fold his arms and to disregard the propaganda that is being spread abroad for the replacing of traditional methods of medical practice by medicine under state control?

AUTOMOBILE ACCIDENTS

As this is being written, the streets and roads are at their worst with ice and snow and a prolonged period of temperature that is nearer zero than it is to freezing; yet the number of major automobile accidents is less than in more pleasant weather. The reason is greater care on the part of drivers. Speed has been given a second place to safety. If such a cautionary attitude could be maintained throughout the year, what a difference it would make to the conservation of life and limb.

The automobile of recent years is almost the last word in efficiency, so far as response and brakes are concerned. It is easily controlled and easily stopped. But the manufacturer cannot go any farther. He cannot control the brain or lack of it behind the steering wheel. Here the personal equation comes in for consideration. We have laws a plenty and yet we have accidents. We have often felt that the same courtesy observed in the home or among social groups, if exercised on the street and highway, would be almost a panacea for automobile accidents. Or to put it another way, let each be willing to give the other the right of way irrespective of the legal right. We are reminded of an epitaph:

Here lies William Strong,
He died maintaining the right of way,
He was right, dead right, as he sped along
But he's just as dead
As if he'd been dead wrong.

Sure and severe sentences by courts are in the right direction. The holding of the

culprit to strict account for any damage caused where such damage is repairable all tend to inspire respect for laws. However, the lesson of January and February should not be forgotten in the balmy days of spring and summer.

A POPULAR PROFESSION

Medicine continues to be the most popular of the learned professions. The registrar of a medical school in the mid-west region of the United States writes: "We have every year over one thousand non-residents applying for admission to the medical school. You can readily see from this that the competition is exceedingly keen. Furthermore, we will not be able to take more than ten non-resident students and probably less. The ones accepted will be among those of superior scholastic attainments. One may have a B average and still not be eligible for admission."

Our own two medical schools have had each year many times the number of applicants that could be accommodated. Many young men who want to study medicine apply for admission to several medical schools. The actual number, therefore, who apply for admission to the medical schools and who are rejected is much smaller than the aggregate applications filed. The overcrowded condition of the profession warrants still further limitation of the number accepted for the study of medicine. The urge to enter a crowded profession is one of the inexplicable paradoxes of the times.

PRIZE WINNERS

Prizes will be offered at the annual meeting of the Michigan State Medical Society for the best scientific exhibits. Ample space for display will be afforded. In addition to opportunities for the presentation of educational exhibits, the presence of the exhibitor to act as a demonstrator adds materially to the interest of the spectator.

The prize winners at the scientific exhibit at the seventieth annual meeting at Sault Ste. Marie were Drs. Grover C. Penberthy and Charles N. Weller, who presented a joint exhibit illustrating the treatment of burns; Dr. E. S. Gurdjian, who presented and demonstrated treatment of skull fractures, and Dr. R. A. MacArthur, whose exhibit illustrated pathologic conditions of the genito-urinary tract.

There were many other exhibits, all of pronounced merit. An hour or so in observing the various specimens and illustrative charts, diagrams, or radiographs will well repay the time spent.

The British Broadcasting Corporation, according to the *Manchester Guardian*, has an audience of over seven million license holders and revenue of 2,472,572 pounds. These figures show that the BBC is a very successful business institution. This sum provides entertainment in which the artists and speakers are paid, permanent orchestras employed as well as ample coverage of operation costs. It also means better programs without a lot of advertising matter, some of it very questionable, being sandwiched in between acts. While there is antipathy to overtaxation, who would not be willing to pay a radio tax of \$1.76 a year if in return he were to have the opportunity to listen to choice programs free from exploitation of somebody's laxatives and cure-alls, with also the elimination of singers with cacophonous voices.

Elsewhere in this number of *THE JOURNAL* appears a letter from Dr. F. C. Warnshuis, now secretary of the California State Medical Association. Dr. Warnshuis writes that in California "Protection against malpractice suits has become a serious problem. There has been a 300 per cent increase in the number of suits filed. Insurance companies' policy premiums are 100 to 150 per cent higher than in Michigan." Is there any stronger argument in favor of maintaining an efficient Medical Defense Board such as we have in Michigan or of the further fact that every eligible physician should be an active member of his county and state medical society?

The Importance of Reading

How are the brains to be strengthened, the sense quickened, the genius awakened, the affections raised—the whole man turned to the best account for the cure of his fellow-men? How are you, when physic and physiology are increasing so marvelously, and when the burden of knowledge, . . . is so infinite; how are you to . . . bear up under all, and use it as not abusing it, or being abused by it?

If our young medical student would take our advice, and for an hour or two twice a week take up a volume of Shakespeare, Cervantes, Milton, Dryden, Pope, Cowper, Montaigne, Addison, Defoe, Goldsmith, Fielding, Scott, Charles Lamb, Macaulay,

Jeffrey, Sydney Smith, Helps, Thackeray, etc., not to mention authors on deeper and more sacred subjects—they would have happier and healthier minds, and make none the worse doctors.

We all know too well that our Art is long, broad and deep . . . and our little hour, brief and uncertain, therefore we would recommend those books as a sort of game of the mind . . . getting fresh, strong views of worn out, old things, and, above all, learning the right use of their reason, and by knowing their own ignorance and weakness, finding true knowledge and strength . . . You must eat the book, you must crush it, and cut it with your teeth and swallow it.—DOCTOR JOHN BROWN.

The Old-time M.D.

(P. Braniff)

His hands were stained with iodine.
His big, thick, gold rimmed glasses
Were slightly smeared and smudged with
Cream o' tartar 'n molasses.
He had no modern fluoroscope
With light and glass and coil.
He had to find the trouble
With a shot of castor oil.
His clothes were slightly wrinkled
And his face was weathered tan.
He sort o' smelled o' tonic
That was good for beast or man.
When your innards were in agony
He didn't probe 'n gape
'N call it highfalutin names—
He called it bellyache.
'N when you got the fever
'N a ringin' in your head
He gave you plain old quinine
'N sent you off to bed.
He could set a broken dog-leg
Or fix a busted bike
Or mend your sister's broken doll
Or anything you'd like.
He knew each family skeleton—
Each poisoned, bitter word—
His ears was filled with gossip,
But you'd never know he heard.
He helped kids come into this world—
He saw old people leave.
He grew a wise and helpful man—
He saw The Master weave.
Little thought he of himself—
No greed had he for gain—
His job was to alleviate
The suffering 'n pain.
He'd vaccinate you with a knife
'N the darn thing always took
'N tell how big 'n brave you were
No matter how you shook.
Without a drop of medicine—
Without a single tool—
He'd look in your eye 'n tell you
To get on back to school.
He knew puppy-love from fever—
He knew mortals' funny ways—
He knew children hardly ever did
Get sick on holidays.
The laboratories of today
Are tributes to his skill.
The specialists and doctors
Are products of his will.
No sacrifice was greater
Than the simple things he did
When he was the family doctor
'N I was a little kid.

—From the *Insurance Field*.



The Editor's Easy Chair

OUR NEIGHBORS

The history of medicine in Canada is almost parallel to that of medicine in the United States. It is natural that it should be so. Canada and the United States as nations had a common origin; they have always had a common language and political and judicial institutions. Their earlier cultural traditions were derived from Great Britain and from France in connection with Quebec, while later, in the United States, education also came under German influence.

The year 1867 is an important one in the history of Canada in more than one respect; it is the year (July 1st) that the British North American Act was passed which united the four provinces of Canada—Ontario, Quebec, New Brunswick and Nova Scotia and made provision for others to be taken into the Union. From a medical viewpoint, it is important as being the year of the consummation of the Canadian Medical Association.* Our American Medical Association came into being in 1847. Medicine had a long history before either of these national associations was formed.

The Canadian Provinces were placed under British control by the Treaty of Paris in 1763. Quebec was the oldest; it also included much of the territory which is now Ontario. A quarter of a century after the Treaty of Paris, we have the first attempt to regulate the practice of medicine. The legislative measure was known as "An ordinance to prevent persons from practicing physic and surgery within the province of Quebec and midwifery in the towns of Quebec and Montreal without license." The object of this measure was to increase the population by lowering the death rate, which was considered possible only by limiting the practice of medicine to those by education and training most competent to practice. The qualified physicians of the day were

those who came to the colonies from England, Scotland and France either as colonists or those who held posts as army surgeons. Needless to say, there were not enough of these qualified practitioners to render medical care to necessarily sparse and scattered population.

* * *

Quacks and charlatans have always been contemporary with orthodox medicine. One qualified practitioner, in a letter to the British Medical Journal in 1847, complains that he is "annoyed by a noted bone setter, who, namely from the happy knack of dislocating his own thumb at pleasure, gulls the public with the belief that no case, however long unreduced, can withstand his manipulations. The snap of his own thumb settles all, and the fee is immediately forthcoming." And again, "Under my own nose lives neighbor B who bleeds and extracts teeth at half the professional charge. . . . In the extirpation of tumors, etc., my scalpels have grown rusty for want of use, as Dr. B, so-called, takes this branch under his care, and unblushingly promises a cure in all cases, benign or malignant, at moderate cost."

* * *

Another attempt was made to improve the medical situation by the incorporation of the College of Physicians and Surgeons for lower Canada (Quebec). This was in 1847.

The first medical act in upper Canada (Ontario) was passed in 1795, four years following the Act of Union, which among other things united and defined the two original provinces of Canada. No one should practice until examined and approved by a board of surgeons to be chosen from surgeons of His Majesty's Hospital and the surgeons of the regiments on duty. However, as mentioned, it was difficult enough to get any kind of medical practitioner to serve the sparse and scattered population without censoring too strictly his qualifications. Hence no record exists of the appointment of the above named board. The act was repealed in 1806 to be superseded by another act in 1815, which, however, confined itself largely to examining pensioners of the War of 1812.

Succeeding attempts towards restrictive medical legislation were somewhat fitful. In 1839, an act incorporating the College of Physicians and Surgeons of upper Canada

*History of the Canadian Medical Association, 1818-1921. By H. E. MacDermot, M.D., F.R.C.P., Toronto: Murray Printing Company, Ltd., 1935.

was passed. It existed for only two years when it was disallowed on the grounds that the powers granted infringed upon the rights and privileges of the Royal College of Surgeons of London. In 1865 an act known as the Parker Act providing for a medical council with the power to prescribe the standard of admission of students and practitioners was passed in 1865. It is interesting to note while on the subject that in the state of Michigan the first attempt at restrictive medical legislation was accomplished in 1899 with the passing of the medical practice act number 237 which, with amendments, is still in force in this state.

It is interesting to note also that during these early years the medical profession of Canada had their difficulties, partly in regard to licensing of homeopaths and eclectics. The debates were very bitter as can be recalled also in Michigan during the earlier years of Michigan's medical history.

Parenthetically, medical journalism had its beginning in Canada, particularly Quebec, as early as 1844 and in upper Canada (Ontario) the first medical journal was published in 1854.

* * *

Up to the time of the confederation, 1867, the efforts of the profession were directed towards the establishment of its legal status with the effort to maintain some degree of regulation of the medical practice.

In harmony with restrictive medical legislation, is the organization of the medical profession into medical associations. The first attempt at the founding of a medical society in Canada was in Quebec in 1844. The object was relief for distressed physicians who could no longer practice through age or infirmity, and, secondly, to care for the wives and families of deceased physicians. This was eventually enlarged to include assistance to the government by advice on such technical matters as hygiene and public health. From this the scope of medical organization broadened to include the advancement of medical science itself in the most extended sense of the term. Another object stated was the protection of the interests of the qualified and licensed practitioners against the inroads and usurpations of the unlicensed, and "the establishment of that union and good feeling among

the members of the profession which should characterize much in the same pursuits." These early attempts at medical organization were to meet obstacles in the way of objections from those who should have been keen supporters of the movement.

It was not until 1867, as has been mentioned, that the Canadian Medical Association became an actual fact. This was doubtless favored by the fact, also mentioned, that the confederation of the four Canadian provinces was consummated the same year. There were, so far as known, 3,000 physicians practicing in Canada that year. The initiative for medical federation originated in Quebec, the oldest province in what henceforth was to be the Dominion of Canada. The first president was Dr. Charles Tupper, afterwards, Sir Charles Tupper of Nova Scotia, who held the office of president the two years following. He later devoted his time to politics and in the nineties was elected prime minister of Canada. Dr. MacDermot, commenting upon Sir Charles Tupper, quotes Sir William Osler, who knew him well, to the effect that Sir Charles was a brilliant example of success of a doctor in politics. If defeated at an election, he would return to his surgical practice, which seemed to develop immediately, to be renounced when success again crowned his efforts at the polls. He lived to the age of 94 years, though at the age of fifty-nine, the author records he had to give up all activities as he was believed to have Bright's disease. His case was referred to by Osler in a paper "On the Advantages of a Trace of Albumen and a Few Tube Casts in the Urine of Men above Fifty Years of Age."

Sir William Osler was president of the Canadian Medical Association in 1884 after two years as general secretary of the association. Dr. MacDermot's book is an entertaining account based on the examination of original records of the evolution of medical organization in Canada. It is highly recommended to those, and their numbers are not inconsiderable, who have received their academic and professional training in Canadian schools.

Note. The relation of the Canadian Medical Association to the various provincial associations is unlike that existing between the American Medical Association and the constituent State Medical Societies. Here the House of Delegates of the American Medical Association is composed of representatives from the various states. There is not such a relation between the provincial medical societies of Canada and the National Association.

BE PREPARED FOR YOUR CANCER PATIENT

CANCER OF THE UTERUS*

The uterus is the most common site of cancer in women; in fact, only the gastrointestinal tract, regardless of sex, is more frequently involved. One-fifth of uterine cancer develops in the fundus and four-fifths in the cervix. In the fundus the neoplastic tissue is derived from the endometrial glands and in the cervix the squamous epithelium of the portio vaginalis is usually the site of origin. Cancer of the cervix is not only more prevalent than cancer of the fundus but it is more serious because its degree of malignancy is generally higher and metastasis more extensive.

That nearly 20,000 women die of uterine cancer annually in the United States is a medical disgrace because the lesion is definitely accessible; while the fundal type cannot be inspected, it is nevertheless easily reached for diagnostic purposes. The danger signs are well known—an abrupt change in character of menses, metrorrhagia, intermenstrual or postmenopausal bleeding, foul-smelling discharge with or without blood and pelvic pain. Unfortunately, these symptoms do not send uterine cancer patients into medical hands promptly, as evidenced by the fact that an average delay of six months exists between the onset of symptoms and the establishment of a diagnosis. This situation is due to several things: (a) complete ignorance regarding cancer on the part of the public, (b) incomplete or inaccurate cancer information possessed by the laity leading to the substitution of unreasoning fear and pessimism for intelligent action, (c) harmful advice by friends, neighbors, quacks, unscrupulous druggists and uninformed physicians and (d) false modesty regarding physical examinations. The first cause is partly the result of the medical profession's failure to fulfill its obligation in matters of lay health education and partly the reluctance of the press in the past to publish articles dealing with the physiology of reproduction and sex hygiene.

Both of these situations are being rapidly corrected.

While it is true that we do not always know the cause of human cancer, it is also true that cancer rarely develops in cervixes properly repaired following delivery. Cancer in any location rarely begins in normal healthy tissue. A survey of a large series of patients with cancer of the cervix has shown that a negligible few had had cervical lacerations repaired. This is an extremely fertile field for preventive medicine. It is believed by some gynecologists that the torn cervix should always be treated surgically before the menopause, but it is doubtful if this is early enough. To the surgeon it should be of interest that nearly 10 per cent of cancers of the cervix occur in retained cervical stumps following partial hysterectomy. Attention has been called to the fact that in skilled hands the mortality of complete hysterectomy is but slightly higher than that of supracervical hysterectomy. It has also been shown that vaginal hysterectomy is a practical and safe operation and one which should play an important rôle in prevention of cancer of the cervix.

If cancer of the cervix is to be successfully combated it is not enough that women report to their physician when symptoms appear. Routine semi-annual pelvic examination of women who have borne children is necessary. The majority of women with cancer of the cervix coming under the observation of the medical profession are in a late stage of the disease and the majority of these patients have not had a pelvic examination for years. The average mother who is a patient in a hospital, the clinic or in the general practice of medicine usually does not receive a pelvic examination unless there are symptoms relative to this area. Cancer of the skin or mouth may be detected by the patient but the cervix can be observed only by the physician. Every physician must spread the doctrine that not only should women report to their physician the moment there are any warnings, signs or symptoms of cancer, but that women after their first childbirth should report for pelvic examination twice yearly. This, of course, will not entirely eliminate cervical cancer deaths, but the present situation, where less than 5 per cent of this disease is seen in an early stage, will be greatly improved.

*This is the fifth contribution sponsored by the Cancer Committee of the Michigan State Medical Society.

Even with semi-annual surveys in vogue, inspection of the cervix is not enough. Every physician cannot be expected to be a cancer expert and even if he were he could not diagnose or rule out cancer in every instance. Microscopical examination of tissue from the suspected area is necessary. There can be no objection to biopsies of the cervix, skin or mouth if adequate treatment is instituted immediately. It is regrettable that in some smaller hospitals and communities competent and prompt tissue diagnostic service is not available. By biopsy we include the diagnostic curettage which is particularly important not only to establish the diagnosis of malignancy of the fundus but to determine the degree of malignancy and sensitivity to irradiation—important factors in treatment. Without microscopical tissue examinations at least 10 per cent of early cancers of the uterus would be undiagnosed. There is nothing more welcome to patient and physician than a negative pathological report when tissue from a suspected cancer has been examined microscopically.

The opinion is rather general that uterine cancer usually occurs in women beyond 35 years of age and particularly beyond the menopause. While this is true of about 90 per cent of such cases, there is still an important 10 per cent occurring between the ages of twenty-five and thirty-five. Cancer of the cervix is obviously becoming more prevalent in the third decade. The disease, therefore, cannot be eliminated on the basis of age.

Choice of treatment of uterine cancer does not enjoy a complete uniformity of opinion. Nor is this necessary. Good results have been obtained by more than one method of treatment. It is necessary in this, as in other diseases, that each specialist recognize and appreciate the value of and indications for treatment in specialties other than his own. Nothing is so disastrous to the cancer patient as the stubborn and exclusive application of methods generally known to be ineffective, or effective only when combined with other forms of treatment. Regardless of the extent to which surgical treatment is employed, radium and deep x-ray therapy are of great, if not major, importance. There is probably more definite indication for surgery, alone or combined with irradiation, in cancer of the fundus than in that

of the cervix. There are some who believe that only x-ray and radium should be used in treating malignancy of the cervix. The last chapter in cancer treatment has certainly not been written and true progress must depend upon complete freedom from dogmatism.

The detection of early cancer is not a one-man job. It may require the coöperation of the patient, the family doctor, the pathologist, the surgeon, the radiologist and the radiotherapist. Even then, a definite diagnosis is not always possible.

In no form of cancer does the value of the family physician stand out so prominently as in cancer of the cervix. His position will be enhanced by aggressiveness both in cancer diagnosis and cancer education.

Slendering While You Sleep

The Manchester Guardian comments in rhyme on an article in the *Journal of the American Medical Association* to the effect that one loses weight during his sleeping hours. The average person is presumed to weight 1.3 pounds less when he rises in the morning than when he retired the night before. This method of slimming has a certain disadvantage inasmuch as the loss is recovered during the day. *The Manchester Guardian* poet, after recounting the various methods of weight reduction, prefers the *Journal A. M. A.* method.

There are those who slim by antic,
And by exercises frantic,
As they roll with Corybantic
Zeal around the bedroom floor;
There are those who trust to diet
And, to keep the waist-line quiet,
Run to fruitarian riot
And to grape-fruit by the score.

Others nurse a hopeful notion
That some patent pill or potion
Will remove without commotion
Any surplus seam or fold;
Some to Turkish baths have bounded,
Where, by clouds of steam surrounded,
They can get themselves well pounded
By a bath attendant bold.

As for me, with some aversion
I regard that rash excursion,
Nor shall diet or exertion
Represent the path I tread.
Let them dope, or jump, or simmer,
Those are lamps that feebly glimmer—
How much better to grow slimmer
As one simply stays in bed!

And if grinning friends turn traitor
As they see one growing greater,
'Cos the tonnage turns up later
As the day draws near its close,
One can spurn all sneers and scorning
With the just and truthful warning:
"You should see me in the morning—
I was sylph-like when I rose!"

MEDICO - LEGAL DEPARTMENT

EFFECT OF PATIENT'S NEGLIGENCE

By *Mr. Neal Fitzgerald*†

A malpractice action, being a species of a tort action at law, is subject to the same defenses as an ordinary tort action. Speaking generally, the plaintiff, in tort actions, cannot prevail unless he can prove two things: first, that the defendant has been guilty of negligence,—that is, has not exercised due care in performing certain actions, or has omitted to perform certain actions which he should have performed; secondly, that the plaintiff himself has been guilty of no contributory negligence. Contributory negligence is careless acting, or omitting to perform a necessary act, on the part of the plaintiff. The negligence predicated, of course, must be a proximate cause of the plaintiff's damage or it won't be considered.

So in a malpractice action, if the doctor can show in his defense that a proximate cause of the damage the plaintiff seeks to prove was negligence on the part of the plaintiff himself, he can relieve himself of liability. It should also be borne in mind in this connection that the doctrine of comparative negligence is not supported in this state, and that if both the physician and patient were negligent, the fact that the defendant physician is shown to have been negligent in a far greater degree than the patient, will not permit the plaintiff to recover. The true doctrine is that the plaintiff must show himself to be free of any contributory negligence whatsoever before he can collect damages.

There are many different types of contributory negligence on the part of patients. It has been held, for instance, that a physician could not be forced to respond in damages to a patient who, in violation of his instructions, removed a fractured arm from the sling at various times, which action contributed to an unfavorable result. It is the duty of the patient to coöperate with the

doctor and to follow out the instructions given. The law recognizes the fact that a patient's recovery depends not on a single factor, the treatment administered, but on two factors: the treatment, plus a course of action by the patient in accordance with the doctor's orders. Therefore, the foolish patient who pays for advice and then refuses to follow it, not only finds himself out of pocket financially and with a possible bad result, but also without a legal remedy. But isn't this poetic justice?

The law goes even farther in this respect and says that, even though the physician gives the patient no instructions, it is the patient's duty to exercise ordinary prudence and care as would be expected of a person in his condition, and, if he fails to do so, his failure will prevent recovery from the physician. What constitutes ordinary prudence and care in each particular case is a question to be decided by the jury.

Every doctor has at sometime or other in his practice run across the patient who either because of the pain involved or for some other reason refused to permit him to pursue a course of treatment which he knows to be the proper procedure in such a case. When this happens, a doctor will sometimes resort to a substitute technique which may or may not be as efficacious. Under such circumstances, no responsibility attaches to the physician or surgeon if the results obtained from the substitute treatment are not as good as would have followed from the usual and ordinary method of procedure, which the patient refused to permit. In such a case, however, it is well for the doctor to be certain that his nurse is present and can testify that the patient did refuse to permit the ordinary routine to be followed. The memory of the patient can become very vague between the day of treatment and the day of trial, and he may unfortunately be unable to recall any objections on his part to any treatment which the doctor attempted to administer.

However, the patient is under no duty to submit to treatment that is injurious and painful and such as no practitioner of ordinary skill and ability would adopt. The doctor is only protected if and when the patient refuses the usual and ordinary method of treatment.

A patient who does not return for further treatment, if so instructed by his physician, cannot recover if injury results from

†Mr. Fitzgerald is a member of the law firm of Douglas, Barbour, Disenberg and Purdy, the attorneys for the Michigan State Medical Society.

his failure. However, if the patient does not return because he discovers that his condition is not improving because of previous negligent treatment, he cannot then be said to be guilty of contributory negligence, and can recover.

It has also been held not to be contributory negligence for a patient not to consult another doctor unless he is fully aware that his injury has not been, and is not being, properly treated. This is even truer when the patient has been constantly reassured by the doctor and told that his progress is satisfactory and a slow recovery is to be expected.

In one case it was held that a physician had been guilty of malpractice and injured a patient, but also that the patient himself by his own want of care had aggravated the injury. In that event, the physician was only liable for the injury proximately resulting from his own negligence, and not for the aggravation caused by the patient's lack of care. This situation is not to be confused with the one previously referred to in our discussion of comparative negligence, as it will be noted that here the patient's negligence was not a partial cause of the injury itself, but merely aggravated an already caused and existing injury.

UNIVERSITY OF MICHIGAN
THE DEPARTMENT OF POSTGRADUATE MEDICINE
and the
MICHIGAN STATE MEDICAL SOCIETY

announce

Intensive Postgraduate Courses

Detroit

Pediatrics	April 20, 21 and 22
Proctology	April 27, 28 and 29
Genito-urinary Diseases	April 30-May 2
Gynecology, Obstetrics and Gynecological Pathology....	May 18-23
General Medicine	May 25-30

Ann Arbor

Electrocardiographic Diagnosis	April 6-11
Diseases of Metabolism.....	March 30-April 3
Medical Military Course.....	April 12-25
Ophthalmology and Otolaryngology.....	April 27-May 2
Roentgenology	June 29-August 7
Laboratory Technique	June 29-August 7

For further information, address:

Department of Postgraduate Medicine
University Hospital
Ann Arbor, Michigan

DEPARTMENT OF SOCIETY ACTIVITY

C. T. EKELUND, M.D., Secretary

GOVERNOR FITZGERALD HEARS MEDICAL VIEWPOINT ON CRIPPLED-AFFLICTED CHILD PROBLEM

A Special Committee appointed by the Executive Committee of The Council on March 18 (Drs. Grover C. Penberthy, Henry Cook, H. H. Cummings, L. Fernald Foster, S. W. Insley, and Ralph H. Pino) met with Governor Fitzgerald on Wednesday, March 25, for discussion of the general problems of medical relief and in particular those of the afflicted-crippled child work.

Dr. Penberthy advised the Governor that the Michigan State Medical Society knows the facts and desires to help him. Dr. Cummings spoke of the flaws in the economic filter and that 4,000 Michigan doctors are vitally interested in a solution of the crippled-afflicted problem. Dr. Insley outlined the surveys made by the State Society's Economic Committee on this subject and presented statistics. Dr. Foster reviewed the development of the medical filter boards, their integration in all but four counties of the State, and the success in those counties using the filter. Dr. Cook presented the general picture of medical relief in all its divisions, as contained in the following letter drafted by the Committee:

Hon. Frank D. Fitzgerald, Governor,
State of Michigan,
Lansing, Michigan.

Dear Governor:

It is with a sense of great responsibility that our committee of the Michigan State Medical Society approaches you today. We are hopeful that we have been able to impress you with our sincerity of purpose in an effort to assist in the solution by you of some of the problems of the people of the State of Michigan in which our profession has a mutual interest.

I believe that it can be substantiated that members of the medical profession have always been willing to give their best service at all times in the interest of public health. This may have been questioned, but, if so, it was done by those who were misinformed. I can assure you that at this time the members of the medical profession in Michigan are of the opinion that the interests of the people go hand in hand with the doctors' interests and that any efforts made in behalf of the medical profes-

sion, should they be contrary to public welfare, should not be given approval.

If plans for a permanent welfare service are to be drawn, this premise is most important: That any necessary service given to the people in which the vendor is not given reasonable compensation is likely to result in an inferior quality of service and cannot endure.

Certain fundamental principles should be considered in the development of any plan of medical relief:

First, medical service must include necessary quantity and good quality of medical care with provision of sufficient monies to operate the same; also absolute preservation of the personal relationship between patient and private physician.

Second, stringent regulations to tighten economic investigation in order to eliminate anyone who is not entitled to medical relief; medical care given to the unworthy will unnecessarily increase the cost and may deprive those who are actually entitled to the service from receiving it.

Third, a proper determination of medical need of the applicant is essential to the efficient administration of any medical relief program. Unnecessary hospitalization may be avoided by a board of three or more physicians conducting examinations of each applicant (stripped).

In order to safeguard these principles just stated, it is our opinion that medical relief should always be separate and divorced from a public health department and should be directed by a physician acting as an assistant to the relief director of the state, in order that the general plan of administration throughout the state should be uniform, using the most successful procedures.

The Michigan State Medical Society most respectfully offers the cooperation of its members in the solution of this problem of medical relief or any other problem in which you may at a future time desire its help.

Very respectfully yours,

MICHIGAN STATE MEDICAL
SOCIETY

By
GROVER C. PENBERTHY, M.D.,
President

HENRY COOK, M.D.,
Chairman of Council
H. H. CUMMINGS, M.D.
L. FERNALD FOSTER, M.D.
S. W. INSLEY, M.D.

Governor Fitzgerald showed great interest in the integration of the filter system, and the sincerity of the medical profession in efforts to aid him.

He told the Committee he intends to appoint a commission to outline legislation designed to revamp and coordinate all State relief agencies, and that the medical profession will be represented on that commission.

The Governor asked how much would be the total cost if physicians were paid accord-

ing to Schedules A and C during April, May, and June, 1936. Dr. Insley replied that his Committee would send these figures to the Governor at once.

SOCIAL SECURITY IN MICHIGAN

ONE of the provisions of the Federal Government in making allotments to states under the Social Security Act for public health, or maternal and child welfare programs, is that such programs are to be developed in consultation with the medical societies of the states. Anent the program in Michigan such a consultation was held in Detroit, on February 17, when several of your officers and committeemen met with Dr. Slemons and Dr. Lillian Smith of the State Department of Health.

Tentative plans broached at that time contemplate the enrollment of six physicians, six sanitary engineers and four nurses in three to four months' courses at the University of Michigan, to fit them for administrative duties in new or existing county or district departments of health. Funds for this project are available through the United States Public Health Service.

A second project purposes to enroll fifteen graduate nurses in public health courses of three or four months at any approved training center in order to fit them to carry on educational programs in maternal and child welfare and in public health. An amount of \$89,000.00 is available for this purpose through the Children's Bureau of the Department of the Interior. After the preliminary training period, these nurses are to be assigned throughout the state at a salary of \$120.00 per month, plus car allowance. They are to conduct classes for women in anatomy and physiology, hygiene of pregnancy and the puerperium, care of infants and young children, control of communicable disease, habit training and adolescence, etc. Classes in hygiene and communicable diseases are to be conducted in schools and these nurses are also to be available to inspect children for communicable disease in schools.

There are forty-three counties in Michigan without local health agencies of any kind. It is expected that most of the effort will be made in these areas.

Since this program touches that of the Maternal Health and Preventive Medicine

Committees of the Michigan State Medical Societies, it is to be resubmitted to these committees shortly after April 1.

Maternal health in the United States is not one of the best examples of progress in medical practice; there is room for improvement. Whether the sought improvement is to be realized in the results of this program remains to be seen. It is doubtful unless the program merits and receives the coöperation of the profession in its actual operation. And, the actual operation of the program will depend very largely upon the personal qualifications of the nurses who will do the work. We are told that they are being very carefully picked and that the qualifications are very exacting.

THE WAY OF ONE FOUNDATION

IN seven counties of Michigan an experiment of very great interest is going on. The experiment is evidently an attempt to determine how much public health is purchasable. That public health is a purchasable commodity has long been recognized, but no one has ever demonstrated the reasonable limits within which this axiom is true.

In these seven counties (Allegan, Barry, Eaton, Hillsdale, Van Buren, Branch and Calhoun) the W. K. Kellogg Foundation has assumed more or less complete financial responsibility for public health administration. Other foundations at other times and in other places have conducted similar extensive and intensive public health programs. In this instance there is the very noteworthy difference, however, that the Foundation has recognized that the physicians practicing within these communities are the *natural* purveyors of public health, that no foundation, however spendthrift its program, can accomplish alone what it can with the help and active support of the physicians. The public health, after all, is but the summation of the health of the individuals.

Accordingly, for several years past the W. K. Kellogg Foundation has gone about making friends of the physicians. In the seven counties there are approximately 260 physicians and all but one are coöperating in the public health program. The foundation has offered courses at recognized teach-

SOCIETY ACTIVITY

ing centers to general practitioners and 73 per cent of them (exclusive of those in Battle Creek) have availed themselves of these opportunities.

The latest project is a two-weeks intensive course offered at the Washington University School of Medicine in St. Louis. About one hundred physicians are expected to leave Battle Creek on April 12 and go back to school until April 25. The two weeks of post-graduate training includes work in obstetrics, heart disease, allergy, blood diseases, infant feeding, preventive pediatrics, conduct of practice and handling of common conditions, infectious diseases, surgical diagnosis, tuberculosis, et cetera.

In sponsoring this and previous educational opportunities the W. K. Kellogg Foundation has made these seven counties a better place in which to be born and live. It is giving to these people a guarantee of a good quality of medical practice and a hundred foci for the practice of and education in preventive medicine.

RELIEF MEDICINE

APPENDED herewith are some interesting figures showing the cost of medical care to relief clients tabulated by counties. Although there is a variation of from 4 cents to \$2.15 per relief case there are a large number of counties in which the figure varies within 20 per cent above and below one dollar with an average of 82 cents for the month. These figures were obtained from the office of the State Emergency Welfare Relief Administration. We hope to be able to publish similar tabulations for succeeding months as they become available.

ANALYSIS OF COUNTY MEDICAL COSTS—

JANUARY, 1936

Counties	Total Relief Cases	Total Medical Cases	Total Medical Costs	Costs per Relief Case	Costs per Medical Case
Alcona	149	39	\$ 171.00	\$1.14	\$4.38
Alger	215	34	123.00	.57	3.61
Allegan	543	13	26.00	.04	2.00
Alpena	243	27	63.00	.25	2.33
Antrim	217	30	159.00	.73	5.30
Arenac	159	23	162.00	1.01	7.04
Baraga	183	32	144.00	.78	4.50
Barry	361	102	654.00	1.81	6.41
Bay	1334	371	1,100.00	.82	2.96
Benzie	316	36	235.00	.74	6.52
Berrien	1581	268	495.00	.31	1.84
Branch	354	47	209.00	.59	4.44
Calhoun	1517	144	481.00	.31	3.34
Cass	568	78	580.00	1.02	7.43
Charlevoix	413	58	131.00	.31	2.25
Cheboygan	401	52	268.00	.66	5.15
Chippewa	292	79	96.00	.32	1.21
Clare	279	36	265.00	.94	7.36
Clinton	370	47	361.00	.97	7.68
Crawford	112	24	151.00	1.34	6.29
Delta	1392	393	929.00	.66	2.36
Dickinson	825	71	363.00	.44	5.11

Eaton	424	50	197.00	.46	3.94
Emmet	331	29	79.00	.23	2.72
Genesee	2776	1035	5,468.00	1.96	5.28
Gladwin	139	17	73.00	.52	4.29
Gogebic	1036	149	793.00	.76	5.32
Gr. Traverse	370	46	80.00	.21	1.73
Gratiot	641	77	410.00	.63	5.32
Hillsdale	407	34	179.00	.43	5.26
Houghton	2295	366	1,587.00	.69	4.33
Huron	250	12	42.00	.16	3.50
Ingham	2307	707	1,465.00	.63	2.07
Ionia	745	121	574.00	.77	4.74
Iosco	223	32	200.00	.89	6.25
Iron	773	147	814.00	1.05	5.53
Isabella	213	44	342.00	1.60	7.77
Jackson	2947	605	2,987.00	1.01	4.93
Kalamazoo	1569	1667	1,510.00	.96	.90
Kalkaska	133	25	133.00	1.00	5.32
Kent	4505	1571	4,565.00	1.01	2.90
Keweenaw	185	19	137.00	.74	7.21
Lake	203	25	184.00	.90	7.36
Lapeer	348	92	649.00	1.86	7.05
Leelanau	175	7	28.00	.16	4.00
Lenawee	634	59	452.00	.71	7.66
Livingston	263	31	156.00	.59	5.03
Luce	87	26	64.00	.73	2.46
Mackinac	206	35	219.00	1.06	6.25
Macomb	849	103	461.00	.54	4.47
Manistee	433	112	389.00	.89	3.47
Marquette	833	112	854.00	1.02	7.62
Mason	320	43	101.00	.31	2.34
Mecosta	358	89	381.00	1.06	4.28
Menominee	624	42	222.00	.35	5.28
Midland	228	70	430.00	1.88	6.14
Missaukee	127	33	217.00	1.70	6.57
Monroe	510	97	550.00	1.07	5.67
Montcalm	654	146	484.00	.74	3.31
Montmorency	97	8	80.00	.82	10.00
Muskegon	1592	339	1,805.00	1.13	5.32
Newaygo	348	35	159.00	.45	4.54
Oakland	3291	892	4,323.00	1.31	4.84
Oceana	240	45	177.00	.73	4.02
Ogemaw	167	24	228.00	1.36	9.50
Ontonagon	260	58	333.00	1.28	5.74
Osceola	280	37	277.00	.98	7.48
Oscoda	83	24	179.00	2.15	7.45
Otsego	138	24	93.00	.67	3.87
Ottawa	403	57	206.00	.51	3.61
Presque Isle	294	36	48.00	.16	1.33
Roscommon	92	10	74.00	.80	7.40
Saginaw	2044	297	795.00	.38	2.67
Sanilac	251	34	112.00	.44	3.29
Schoolcraft	251	41	243.00	.96	5.92
Shiawassee	637	78	353.00	.55	4.52
St. Clair	1410	155	526.00	.37	3.39
St. Joseph	473	62	216.00	.45	3.48
Tuscola	339	7	13.00	.03	1.85
Van Buren	673	28	177.00	.26	6.32
Washtenaw	1233	95	718.00	.58	7.55
Wayne	22590	7522	18,987.00	.84	2.52
Wexford	662	11	43.00	.06	3.90

Entire State.....	78794	19798	\$64,807.00	\$0.82	\$3.27
-------------------	-------	-------	-------------	--------	--------

APRIL FIRST

From the By-Laws of the Michigan State Medical Society:

Chapter 8. Annual Dues.

Section 1. The Secretary of each county society shall collect and forward the dues to the State Secretary on or before April first of each year.

Section 2. Any member in arrears after April 1st of each official year shall stand suspended until his name is properly recorded and his dues for the current year properly remitted.

TWO IMPORTANT MEDICAL GOLF TOURNAMENTS

1. American Medical Golfing Association, 22nd Annual Competition, Mission Hills and Kansas City Country Clubs, Kansas City, Mo., Monday, May 11, 1936 (first day of annual American Medical Association meeting).

2. Michigan State Medical Society's first annual tournament, Detroit, Tuesday, September 22, 1936, 1:30 P. M. (The local Committee is negotiating for one of the best courses in the district, but arrangements are not as yet complete.)

SOCIETY ACTIVITY

ANALYSIS OF EXPENDITURES FOR 1935

Society Expense—1935

January	
Western Union	\$ 9.28
Addressograph Sales	2.46
Dr. B. R. Corbus and Dr. R. R. Smith— travel	35.00
	\$ 46.74

February	
Joint Committee on Public Health Edu- cation	\$500.00
Michigan Bell Telephone	7.65
Western Union Telegraph Co.	4.29
Addressograph Sales	1.36
Railway Express .....	.62
Michigan Bell Telephone	14.80
B. R. Corbus—Travel	68.00
J. H. Powers—Travel	8.75
	605.47

March	
Western Union Telegraph Co.	1.55
Railway Express	1.20
Addressograph Sales	2.72
Michigan Bell Telephone	7.25
Florence Ames, Secy. Conf.	2.80
F. L. S. Reynolds, Secy. Conf.	45.00
E. J. Dougher, Secy. Conf.	7.84
G. C. Stewart, Secy. Conf.	66.00
P. Drummond, Secy. Conf.	5.25
L. F. Foster, Secy. Conf.	7.84
B. A. Holm, Secy. Conf.	18.30
E. F. Sladek, Secy. Conf.	22.60
M. G. Wood, Secy. Conf.	14.70
C. W. Colwell, Secy. Conf.	3.85
B. J. Graham, Secy. Conf.	7.70
H. A. Adronie, Secy. Conf.	7.70
R. A. Springer, Secy. Conf.	8.60
T. Y. Ho, Secy. Conf.	7.00
H. Kessler, Secy. Conf.	22.50
R. H. Nichols, Secy. Conf.	13.20
Chas. A. Teifer, Secy. Conf.	16.32
J. J. McCann, Secy. Conf.	7.00
B. T. Montgomery, Secy. Conf.	30.65
R. L. Finch, Secy. Conf.	4.41
E. J. Brenner, Secy. Conf.	24.50
W. H. Barnum, Secy. Conf.	11.55
John Lawther, Secy. Conf.	5.95
G. C. Penberthy—Travel	32.00
	405.98

April	
Kenneth Pierce, Secy. Conf.	10.50
Addressograph Sales	3.49
Western Union Telegraph	3.69
S. C. Moore, Secy. Conf.	13.12
Elinor E. Clark, Secy. Conf.	26.21
John Whalen, Secy. Conf.	8.75
University of Michigan, Secy. Conf.	21.00
B. R. Corbus—Travel	22.00
Insurance and postage on coupons ret'd.	.20
	108.96

May	
Michigan Bell Telephone Co.	10.40
Addressograph Sales	4.20
Western Union Telegraph Co.	4.14
E. Graversen	1.50
Michigan Bell Telephone Co.	21.20
Survey Graphic	2.00
A. W. Chase, Secy. Conf.	2.59
B. R. Corbus	3.76
B. R. Corbus—Travel	169.25
C. T. Ekelund—Travel	75.00
C. T. Ekelund—Travel	61.72
	355.76

June	
Dr. Wm. Carey	4.50
Postal Telegraph	1.61
Addressograph Sales	2.44
Smith-Searle & Strawhecker	5.00
U. S. Chamber of Commerce	7.50
	21.05

July	
Michigan Bell Telephone Co.	20.50
Grand Rapids Trust Co.	1.29
Western Union Telegraph Co.	2.28
Postage and Insurance on coupons ret'd.	.45
	24.52

August	
Michigan Bell Telephone Co.	11.40
C. T. Ekelund	1.92
H. A. Luce	4.40
Western Union Telegraph Co.	2.27
Addressograph Sales	4.22
Michigan Bell Telephone Co.	9.90
B. R. Corbus	5.00
B. R. Corbus—Travel	7.80
C. T. Ekelund—Travel	16.80
	63.71

September	
E. Graversen .....	.35
Western Union Telegraph Co.	4.98
Addressograph Sales	1.99
Michigan Bell Telephone Co.	12.85
J. H. Dempster	8.98
Columbia Storage & Transfer Co.	12.02
D. L. Gadbery	35.00
B. R. Corbus and R. R. Smith—Travel	8.85
J. H. Dempster—Travel	31.00
	116.02

October	
Western Union Telegraph Co.	4.50
H. A. Luce	10.47
Hotel Ojibway	25.44
C. T. Ekelund	3.50
Camera Shop	3.55
Addressograph Sales .....	.94
Wm. J. Carey	3.75
Columbia Storage & Transfer Co.	24.00
Michigan Bell Telephone Co.	8.30
D. L. Gadbery	20.00
B. R. Corbus—Travel	8.50
C. T. Ekelund—Travel	12.48
B. R. Corbus—R. R. Smith—Travel	32.00
B. R. Corbus—Travel	17.00
R. R. Smith—Travel	89.21
	263.64

November	
Addressograph Sales	3.26
Preusser Jeweler	1.60
Elks Club	25.55
Western Union Telegraph Co.	4.57
Shank Storage Co.	68.95
C. T. Ekelund	4.54
American Medical Association .....	.50
Beurmann-Marshall, Inc.	6.15
R. R. Smith—Reprints	17.25
C. T. Ekelund—Travel	33.50
Grover C. Penberthy—Travel	30.00
B. R. Corbus—Travel	4.50
Roy H. Holmes—Travel	12.24
C. T. Ekelund—Travel	19.80
	232.41

December	
Western Union Telegraph Co.	4.44
B. R. Corbus	2.50
Beurmann-Marshall, Inc.	5.75
Michigan Bell Telephone	27.25
Smith Floral Co.	5.62
R. E. Olds Co.	40.72
W. L. Hermes Co.	5.95
Postage reimbursement .....	.22
Postal Telegraph Co. ....	.90
Henry Cook	8.65
Collect Telegram .....	.63
C. T. Ekelund—Travel	16.80
	119.43

Less—Unexpended fund from Code Authority	2.34
Refund on B. R. Corbus' Fidelity Bond	3.63
	5.97
	\$2357.72

Miscellaneous General Office Expense—1935

January	
Accounts charged off	\$ 4.86
C. F. Jean—Janitor	2.00
	6.86

February	
Accounts charged off	51.25
Bank charges	1.02
H. W. TenBroek & Sons	11.00
C. F. Jean—Janitor	2.00
	65.27

March	
Accounts charged off	18.27
	18.27

April	
Accounts charged off	6.95
Exchange charge on protested check ..	.50
	7.45

May	
Accounts charged off	18.00
Ernst & Ernst	246.38
	264.38

July	
O. E. Atwood, Secretary of State, non- profit corporation filing fee	2.00
	2.00

September	
Grand Rapids Insurance Co.	62.50
	62.50

SOCIETY ACTIVITY

October		
Accounts charged off.....	43.97	43.97
November		
Bank Charge .....	.97	
Grand Rapids Trust Co.....	5.50	
Grand Rapids Insurance Agency.....	23.84	
	<u>30.31</u>	
December		
L. C. Smith Typewriter Co.....	116.40	
Postage on coupons.....	.06	
The Ediphone Co.....	27.56	
	<u>144.02</u>	
	\$ 645.03	
Less—Refund on Fidelity Bond of Dr. F. C. Warnshuis.....	19.45	
	<u>\$625.58</u>	

Printing, Stationery and Supplies Expense—1935

January		
Kessler Office Supplies.....	\$ 4.99	
Ward-Schopps Co.....	49.65	
Maurice Polack, Inc.....	3.61	
	<u>58.25</u>	
February		
Ward-Schopps Co.....	31.17	
Remington-Rand, Inc.....	7.21	
Kessler Office Supplies.....	6.84	
Maurice Polack, Inc.....	6.80	
Mills-Broderick Printing Co.....	109.81	
Tisch-Hine Co.....	2.87	
	<u>164.70</u>	
March		
Kessler Office Supplies.....	6.69	
Mills-Broderick Printing Co.....	37.24	
	<u>43.93</u>	
April		
Kessler Office Supplies.....	1.03	1.03
May		
Kessler Office Supplies.....	11.03	
Mills-Broderick Printing Co.....	23.07	
Maurice Polack, Inc.....	3.61	
	<u>37.71</u>	
June		
Kessler Office Supplies.....	1.57	1.57
July		
H. K. Harris.....	5.00	
Kessler Office Supplies.....	.62	
Postmaster	2.12	
	<u>7.74</u>	
August		
Kessler Office Supplies.....	4.27	
Maurice Polack, Inc.....	3.61	
Mills-Broderick Printing Co.....	6.95	
Railway Express Agency.....	22.02	
Ward-Schopps Co.....	8.50	
	<u>45.35</u>	
September		
Kessler Office Supplies.....	7.63	
Bixby Office Supplies.....	.72	
	<u>8.35</u>	
October		
Kessler Office Supplies.....	5.82	
Maurice Polack, Inc.....	3.61	
	<u>9.43</u>	
November		
Ward-Schopps Co.....	25.75	
Gregory Mayer & Thom Co.....	16.54	
General Printing Co.....	4.32	
Postmaster	11.20	
Maurice Polack, Inc.....	2.58	
Mills-Broderick Printing Co.....	34.59	
Ward-Schopps Co.....	91.67	
	<u>186.65</u>	
December		
Acme Letter Service.....	30.14	
Wm. L. Hermes Co.....	32.49	
General Printing Co.....	1.88	
Gregory, Mayer & Thom Co.....	19.08	
Maurice Polack, Inc.....	3.61	
	<u>87.20</u>	
Plus unpaid bills.....	\$ 651.19	
	16.64	
	<u>\$668.55</u>	

Post Graduate Conferences Expense—1935

July		
John L. Law.....	\$ 4.00	
James H. Maxwell.....	4.00	
Howard McCluskey	24.00	
C. C. Sturgis.....	27.00	
F. C. Collier.....	27.00	
A. C. Furstenberg.....	27.00	
S. Milton Goldhamer.....	4.00	
	<u>117.00</u>	

September		
B. R. Corbus.....	12.00	12.00
November		
A. M. Campbell.....	27.50	
H. H. Cummings.....	55.00	
E. C. Montgomery.....	27.50	
R. W. Waggoner.....	27.50	
D. P. Foster.....	55.00	
D. M. Cowie.....	27.50	
D. J. Levy.....	27.50	
G. H. Belote.....	27.50	
F. A. Collier.....	27.50	
A. D. LaFerte.....	27.50	
H. A. Freund.....	27.50	
R. Isaacs.....	27.50	
G. M. Curtis.....	137.50	
W. E. Keane.....	27.50	
L. J. Hirschman.....	82.50	
H. Henderson.....	27.50	
J. L. Law.....	55.00	
F. N. Wilson.....	27.50	
F. J. Hodges.....	28.00	
	<u>825.50</u>	
	\$ 954.50	

Economics Committee Expenses—1935

February		
W. H. Marshall.....	\$ 28.70	
Edwards Bros.	132.44	
	<u>161.14</u>	
March		
Hotel Statler	3.00	
W. H. Marshall.....	76.40	
	<u>79.40</u>	
April		
W. H. Marshall.....	20.80	20.80
May		
Hotel Statler	2.00	
W. H. Marshall.....	12.50	
I. W. Greene.....	12.00	
Edwards Bros.	26.45	
	<u>52.95</u>	
June		
W. H. Marshall.....	10.45	10.45
July		
W. H. Marshall.....	3.30	3.30
August		
H. B. Fenech.....	10.20	
Edwards Letter Shop.....	66.95	
E. Graversen.....	.71	
W. H. Marshall.....	11.00	
F. A. Baker.....	6.00	
C. T. Ekelund.....	9.76	
	<u>104.62</u>	
September		
V. M. Moore.....	13.80	
V. M. Moore.....	18.60	
U. of M. Union.....	9.00	
C. T. Ekelund.....	19.58	
W. H. Marshall.....	57.80	
I. W. Greene.....	8.40	
F. A. Baker.....	6.31	
	<u>133.49</u>	
October		
Edwards Letter Shop.....	3.28	
C. T. Ekelund.....	10.00	
	<u>13.28</u>	
December		
Walter W. McPherson.....	140.00	
S. W. Insley.....	4.50	
	<u>144.50</u>	
Plus unpaid bill.....	\$ 723.93	
	.30	
	<u>\$ 724.23</u>	

Joint Committee Receipts and Disbursements—1935

Receipts		
Balance from 1934.....	\$ 11.42	
January		
Detroit News	\$173.07	173.07
February		
Michigan Dental Society.....	150.00	
Detroit News	76.92	
Michigan State Medical Society.....	500.00	
	<u>726.92</u>	
March		
Detroit News	76.92	76.92
May		
Michigan Tuberculosis Association....	50.00	
Wayne University College of Medicine....	50.00	
Detroit News	173.07	
Michigan Dental Society.....	50.00	
Michigan State Nurses.....	25.00	
Michigan Department of Health.....	50.00	
Michigan Hospital Association.....	100.00	
	<u>498.97</u>	

SOCIETY ACTIVITY

June		
Detroit News	76.92	76.92
July		
Detroit News	76.92	76.92
August		
Detroit News	96.15	96.15
October		
Detroit News	76.92	76.92
November		
Children's Fund of Michigan.....	1500.00	
Detroit News	173.07	
		1673.07
		\$3486.38

Disbursements

January		
Mabel Kelly	\$100.00	
Herman Riecker	75.00	
		\$ 175.00
February		
Mabel Kelly	200.00	
Herman Riecker	150.00	
		350.00
March		
Mabel Kelly	100.00	
Herman Riecker	75.00	
		175.00
April		
Mabel Kelly	100.00	
Herman Riecker	75.00	
		175.00
May		
Don Lyons	48.00	
Mabel Kelly	100.00	
Herman Riecker	75.00	
		223.00
June		
Mabel Kelly	100.00	
Herman Riecker	75.00	
		175.00
July		
University of Michigan.....	6.65	
Mabel Kelly	100.00	
Herman Riecker	75.00	
		181.65
August		
Mabel Kelly	100.00	
Herman Riecker	75.00	
		175.00
October		
University of Michigan.....	9.43	9.43
November		
Don Lyons	34.00	
Herman Riecker	225.00	
Mabel Kelly	300.00	
University of Michigan.....	114.36	
		673.36
December		
Herman Riecker	75.00	
Mabel Kelly	100.00	
		175.00
		\$2487.44

Medico-Legal Defense Receipts and Disbursements—1935

Receipts

January		
Dues	\$259.75	\$ 259.75
February		
Dues	717.50	717.50
March		
Dues	1358.50	1358.50
April		
Dues	1855.19	
Coupons	192.50	
		2047.69
May		
Dues	709.04	709.04
June		
Dues	86.53	86.53
July		
Dues	101.62	
Coupons	100.00	
		201.62
August		
Dues	68.25	68.25
September		
Dues	45.75	45.75
October		
Dues	57.95	
Coupons	165.00	
		222.95
November		
Dues	22.12	22.12
December		
Dues	34.48	
Coupon	25.00	
		59.48
		\$5799.18

Disbursements

January		
Douglas, Barbour	\$199.05	
Wm. J. Stapleton, Jr.....	83.33	
		\$ 282.38
February		
Wm. J. Stapleton, Jr.....	83.33	
Douglas, Barbour	325.00	
		408.33
March		
Mills-Broderick Printing Co.....	19.00	
Douglas, Barbour	96.00	
Wm. J. Stapleton, Jr.....	89.99	
Williams Co.	3.00	
		207.99
April		
Douglas, Barbour	183.50	
Wm. J. Stapleton, Jr.....	83.33	
		266.83
May		
Wm. J. Stapleton, Jr.....	83.33	83.33
June		
Wm. J. Stapleton, Jr.....	83.33	
Douglas, Barbour	120.00	
		203.33
July		
Wm. J. Stapleton, Jr.....	86.10	86.10
August		
Wm. J. Stapleton, Jr.....	83.33	
Douglas, Barbour	250.00	
		333.33
September		
Wm. J. Stapleton, Jr.....	83.33	83.33
October		
Wm. J. Stapleton, Jr.....	83.33	83.33
November		
Douglas, Barbour	704.00	
Wm. J. Stapleton, Jr.....	83.33	
		787.33
December		
Wm. J. Stapleton, Jr.....	83.33	83.33
		\$2908.94
Plus unpaid bills.....		25.00
		\$2933.94

Council Expenses—1935

January		
H. E. Perry.....	\$ 46.60	
B. R. Corbus.....	40.00	
H. A. Luce.....	12.63	
		\$ 99.23
February		
B. R. Corbus.....	26.85	
J. H. Powers.....	32.75	
B. H. Van Leuven.....	39.90	
F. A. Baker.....	19.44	
Mid-Winter Meeting of The Council.....	113.12	
Henry Cook	14.10	
W. A. Manthei.....	51.02	
Hotel Olds	26.11	
H. H. Cummings.....	15.67	
C. E. Boys.....	24.00	
Harlen MacMullen.....	21.30	
T. F. Heavenrich.....	27.80	
H. R. Carstens.....	10.08	
		422.14
March		
Michigan Union	10.23	
Grover C. Penberthy.....	13.75	
J. H. Powers.....	3.20	
T. P. Treynor.....	22.00	
		49.18
April		
J. H. Powers.....	7.00	
T. F. Heavenrich.....	14.52	
Wm. A. Hyland.....	13.24	
H. R. Carstens.....	4.56	
		39.32
May		
H. R. Carstens.....	6.96	
B. R. Corbus.....	12.60	
T. F. Heavenrich.....	8.74	
Flint City Club.....	37.64	
		65.94
June and July		
J. H. Powers.....	10.11	10.11
August		
B. R. Corbus.....	22.00	
C. E. Boys.....	17.16	
T. F. Heavenrich.....	15.02	
F. A. Baker.....	12.43	
H. R. Carstens.....	11.28	
H. A. Luce.....	12.60	
C. T. Ekelund.....	8.40	
		98.89
September		
J. H. Powers.....	63.05	
G. C. Hafford.....	19.10	
Harlen MacMullen.....	26.40	
Country Club	17.25	
T. F. Heavenrich.....	53.64	
		179.44

SOCIETY ACTIVITY

October

H. R. Carstens	14.07
H. H. Cummings	21.30
Hotel Ojibway	33.84
C. T. Ekelund	100.63
V. M. Moore	38.28
C. E. Boys	54.68
Wm. A. Hyland.....	36.00
	298.80

November

Statler Hotel	33.53
C. E. Boys	13.95
T. F. Heavenrich.....	26.86
Henry Cook	51.12
P. R. Urmston.....	88.20
	213.66

December

Statler Hotel	28.01
Henry Cook	28.25
W. A. Manthei	20.50
T. F. Heavenrich	7.20
B. R. Corbus	9.00
	92.96

Plus unpaid bills	\$1569.67
	51.52
	\$1621.19

Public Relations Committee Expenses—1935

December

L. Fernald Foster—Travel.....	\$ 69.60	\$ 69.60
-------------------------------	----------	----------

Cancer Committee Expenses—1935

June

University of Michigan.....	\$ 39.45
Edwards Bros.	28.00
R. W. Morrissey	50.00
	117.45

August

R. W. Morrissey.....	50.00
Edwards Bros.	17.00
University of Michigan	15.00
	82.00

October

University of Michigan.....	15.00
R. W. Morrissey.....	50.00
	65.00

November

University of Michigan.....	58.40
Edwards Bros.	56.00
	114.40

\$ 378.85

Delegates to American Medical Association Expenses—1935

June

L. J. Hirschman	\$ 96.48
H. A. Luce.....	99.48
C. F. Moll.....	86.87
	202.24

July

J. D. Brook.....	95.68
C. S. Gorsline.....	106.56
	282.83

\$ 485.07

Legislative Committee Expense—1935

January

James B. Bradley	\$125.00	\$ 125.00
------------------------	----------	-----------

February

James B. Bradley.....	100.00
Hotel Olds	32.99
	132.99

March

Hotel Olds	105.96
James B. Bradley.....	314.54
Mills-Broderick Printing Co.....	15.04
	435.54

April

James B. Bradley and H. E. Perry....	794.53
Hotel Olds	190.05
Philip Riley	47.60
L. G. Christian.....	51.75
	1083.93

May

Hotel Olds	259.72
L. G. Christian.....	188.31
H. E. Perry.....	85.00
	533.03

June

L. G. Christian.....	194.14
James B. Bradley.....	27.82
H. E. Perry.....	78.91
Hotel Olds	103.21
	404.08

July

H. E. Perry.....	57.50	57.50
------------------	-------	-------

August

Philip A. Riley.....	22.40	22.40
----------------------	-------	-------

September

Hotel Olds	19.93	19.93
------------------	-------	-------

October

Wm. A. Hyland.....	105.00
James B. Bradley.....	500.00
	605.00

November

H. E. Perry.....	33.83
Wayne County Cafe.....	9.90
L. G. Christian.....	13.58
	57.31

December

Wayne County Cafe.....	10.17
C. F. Snapp.....	36.00
	46.17

Plus unpaid bills.....	\$3522.88
	20.88
	\$3543.76

Radio Committee Expenses—1935

March

Wm. J. Stapleton, Jr.....	\$ 1.50	\$ 1.50
---------------------------	---------	---------

July

Wm. J. Stapleton, Jr.....	2.50	2.50
---------------------------	------	------

\$ 4.00

Expenses—1935

	Editor's Salary	Rent	Postage	Reprint Expense	Secretary Salary	Executive Secretary	Stenographers
January	\$250.00	\$ 68.00	\$	\$ 73.50	\$ 333.00	\$	\$ 223.00
February	250.00	68.00	29.00	84.35	333.00	.....	171.00
March	250.00	68.00	26.00	342.28	333.00	.....	179.00
April	250.00	68.00	55.25	147.75	333.00	.....	184.50
May	250.00	68.00	33.00	196.20	333.00	.....	235.75
June	250.00	68.00	.....	79.20	333.00	.....	155.00
July	250.00	68.00	20.00	110.65	333.00	.....	159.00
August	250.00	68.00	35.50	170.15	333.00	.....	199.00
September	250.00	68.00	.....	127.75	333.00	.....	164.50
October	250.00	68.00	29.50	.....	333.00	.....	225.50
November	250.00	.....	76.25	69.25	336.67	500.00	339.55
December	250.00	60.00	76.75	25.70	333.33	500.00	270.70
	\$3000.00	\$740.00	\$381.25	\$1426.78	\$4000.00	\$1000.00	\$2506.50

Maternal Health Committee Expenses—1935

February		
A. M. Campbell.....	\$ 15.26	\$ 15.26
May		
A. M. Campbell.....	17.08	17.08
July		
Harold C. Mack.....	20.00	
Norman F. Miller.....	18.96	38.96
September		
Harold L. Hurley.....	25.80	25.80
December		
Norman F. Miller.....	6.70	6.70
		\$ 103.80

Preventive Medicine Committee Expenses—1935

August		
Roy H. Holmes.....	\$ 63.30	
James J. O'Meara.....	36.48	
L. Fernald Foster.....	36.60	\$ 136.38
September		
C. R. Keyport.....	39.72	39.72
October		
A. L. Callery.....	33.60	
Roy H. Holmes.....	16.20	49.80
		\$ 225.90
Plus unpaid bills.....		15.45
		\$ 241.35

Annual Meeting Expenses—1935

February		
Merrill Wells	\$ 12.63	
Section Officers	23.43	
J. D. Miller.....	14.40	\$ 50.46
May		
B. R. Corbus.....	25.00	
Frank J. Mester.....	3.50	28.50
June		
Frank J. Mester.....	3.00	
Western Union	25.88	28.88
July		
Thomas Blue Print Service Shop.....	2.32	2.32
August		
B. R. Corbus.....	25.00	
Postmaster	35.00	60.00
September		
F. L. Rector.....	23.66	
Bard-Parker Co.	10.00	
E. Graversen	47.20	
J. H. Musser.....	88.80	
S. Marx White.....	25.60	
Wolverine Art Shops.....	36.54	
Bruce Publishing Co.....	64.81	
B. R. Corbus.....	87.20	
Milo Arts and Crafts.....	250.00	
Frank J. Mester.....	2.00	636.01
October		
General Contractors	84.40	
J. P. LeBlanc.....	35.00	
Edison Sault Electric	27.91	
Electrical Contractors	170.43	
R. E. Dodd.....	10.90	
F. J. Ellis & Son.....	16.00	
F. C. Bandy.....	4.50	
Hotel Ojibway	51.71	
B. R. Corbus.....	50.85	
L. W. Wieder.....	26.11	
Geo. W. Hall.....	30.00	
V. Johnson	19.02	526.83
		\$1333.00
Credit for Exhibit Booths sold.....		640.00
		\$ 693.00

COUNCIL AND COMMITTEE MEETINGS

1. *March 7, 1936*—Committee on Maternal Health—University Hospital, Ann Arbor—11:00 a. m.
2. *March 15, 1936*—House of Delegates' Committee on Medico-Legal work—Pantlind Hotel, Grand Rapids—2:30 p. m.
3. *March 17, 1936*—Special Committee on Social Security (Maternal and Child Health Phase)—Statler Hotel, Detroit—2:00 p. m.
4. *March 17, 1936*—Legislative Committee—Wayne County Medical Society Building, Detroit—6:30 p. m.
5. *March 18, 1936*—Public Relations Committee—Olds Hotel, Lansing—2:30 p. m.
6. *March 18, 1936*—Executive Committee of The Council, Lansing City Club, Lansing—7:00 p. m.
7. *March 22, 1936*—Medical Economics Committee—Olds Hotel, Lansing—12:30 p. m.
8. *March 24-25, 1936*—Subcommittee of Special Contact Committee to Governmental Agencies—Olds Hotel and the Capitol (two meetings).
9. *March 27, 1936*—Committee on Maternal Health, University Hospital, Ann Arbor—11:00 a. m.
10. *April 1, 1936*—Joint meeting of Committee on Preventive Medicine and Maternal Health Committee—State Board of Health, Lansing—3:00 p. m.
11. *April 8, 1936*—Public Relations Committee—Olds Hotel, Lansing—3:00 p. m.

COMMITTEE DECISIONS

The undue enthusiasm of professional and amateur social workers in increasing the case load of afflicted and crippled children, coupled with an inadequate economic investigation, will break down any program devised to bring reasonable medical care to indigents. No matter how good the medical filter, the other two factors will far outweigh the advantages developed by the work of physicians. (See Public Relations Committee minutes of March 18, item 4(d).)

“Urgency” and “Necessity”—what are the specifications of each? For the PRC recommendation, see minutes of March 18, item 4(d).

The Crippled Children Commission passed the following resolution on February 20, 1936: “In any case where there are payments made for a committed State patient, through parent or guardian (referring to afflicted-crippled children cases) that the reimbursement to the State shall be paid in full before any additional payments are made to the hospital or to the physician.” (See Item 11 of Minutes of Executive Committee, February 26, 1936.)

A booklet containing arguments against the socialization of medicine was the subject of discussion by the Executive Committee of The Council on February 26. (See item 6 of minutes.)

Condition of the bonds of MSMS?—read item 8 of Executive Committee minutes of February 26.

What age groups make up the greater attendance at the Postgraduate Conferences of the Michigan State Medical Society and the Postgraduate Department of the University of Michigan? Is it those graduated less than ten years ago? Is it those graduated between ten and twenty-five years ago? Is it those graduated more than twenty-five years ago? (For answer,

see item 3 of minutes of Committee on Postgraduate Medical Education, March 3.)

Have the social aspects of medical care any place in the postgraduate training of physicians who are out in practice? (See item 5 of minutes of Committee on Postgraduate Medical Education, March 3.)

MINUTES OF MEETING OF CANCER COMMITTEE

February 21, 1936

The Cancer Committee held its last meeting at the Olds Hotel in Lansing on Friday, February 21, 1936.

Plans were perfected for extending cancer education to the public through the Cancer Subcommittee. For this purpose duplicate sets of lantern slides are being prepared and will be placed in the hands of Subcommittee members to illustrate lay cancer talks.

To supplement lay cancer education activities, cancer booklets are being prepared which will follow fairly closely the newspaper articles which have appeared under the auspices of the Cancer Committee during the past year.

The next meeting will be held in April.

OSBORNE A. BRINES, M.D., *Chairman.*

MINUTES OF MEETING OF THE EXECUTIVE COMMITTEE OF THE COUNCIL

February 26, 1936

1. *Roll Call.*—The meeting was called to order by Dr. Henry Cook, Chairman, at 3:30 p. m., in the Statler Hotel, Detroit. Present were Drs. Cook of Flint; T. F. Heavenrich of Port Huron; C. E. Boys of Kalamazoo; A. S. Brunk and H. R. Carstens of Detroit; and F. E. Reeder of Flint. Also present were President Grover C. Penberthy, Secretary C. T. Ekelund, Treasurer Wm. A. Hyland, Editor James H. Dempster, L. Fernald Foster, Chairman of Public Relations Committee, and Executive Secretary Wm. J. Burns.
2. *Minutes.*—The minutes of the Third Session of The Council meeting of January 16, 1936, were read. Item 36 relative to sending Committee report on Army Medical Corps to members of Congress in Washington was discussed; motion of Drs. Heavenrich-Boys that the Secretary be directed to mail a copy of the resolutions as approved to each member of Congress in Washington. Carried unanimously. Motion of Drs. Carstens-Heavenrich that the minutes as read be approved. Carried unanimously.
3. *Councilor for Eighth District.*—President Penberthy announced the resignation of Dr. Julius Powers as Councilor of the Eighth District, due to illness. He appointed Dr. Wm. E. Barstow of St. Louis, Michigan, as Councilor of that District to fill the unexpired term of Dr. Powers, to the Annual Meeting of September, 1937.
4. *Practice of Medicine, Osteopathy, etc.*—A report from Attorney Herbert V. Barbour was read stating that no change had been made in the osteopathic litigation in Wayne County as Judge Vincent M. Brennan was away on a vacation and as yet has rendered no opinion.
5. *Medico-Legal.*—Secretary Ekelund reported that he had written Berrien County re its resolution

on payment of Medico-Legal dues for 1936, but had received no reply. Dr. Boys reported that he also had written this County Medical Society fully explaining the importance of Medico-Legal defense, but had received no reply.

6. *Brief on Socialization of Medicine.*—The Brief on Socialization of Medicine recommended by the PRC for debate purposes was outlined. Motion of Drs. Boys-Heavenrich that this be completed, printed, and dispensed to the medical profession of Michigan, following submission to the Medical Economics Committee and to the Public Relations Committee, and reference back to the Executive Committee of The Council later, and after approval by the A. M. A. Carried unanimously.
7. *A. M. A. Booklets on Socialization of Medicine.*—The need for supplying information as developed by the A. M. A. on the socialization of medicine to high schools, colleges, public libraries, Y.M.C.A.'s, Y.W.C.A.'s, to influential citizens, legislators, to some on the lists of the Extension Division was explained by Dr. Foster for the Public Relations Committee. Motion of Drs. Carstens-Boys that the Secretary be authorized to send packages of literature (21 booklets in each) to various individuals, groups, and organizations as found necessary, same to be accompanied by a letter as developed and read by the Executive Secretary. Carried unanimously. It was brought out that the printing of these booklets for the 1,000 packages received by the M.S.M.S. cost the A. M. A. approximately \$2,800 and that this literature had been donated to the M.S.M.S. The Executive Committee placed a vote of thanks to the A. M. A. in its minutes.
8. *Treasurer's Report.*—Dr. Hyland presented three matters for consideration, which report was approved.
Condition of Bonds.—The Chairman of the Finance Committee, Dr. Carstens, reported on the excellent condition of the bonds of the M.S.M.S.; they are in favorable position and have done very well, especially when one considers the sad personal experiences of many individuals who were in the bond market during the past six or seven years. The officers of the M.S.M.S. who selected the bonds owned by the M.S.M.S. are to be congratulated and thanked, Dr. Carstens stated.
9. *Report of Subcommittee on Relief Medicine.*—Dr. Insley reported for his Committee, presenting results of the survey made on the afflicted-crippled child law costs. The findings and deductions from the statistics are not ready as yet. The Subcommittee asked the Executive Committee of The Council for advice relative to a program for border-line cases; is the Subcommittee to try to work out a program for border-line cases based on the principles adopted by the House of Delegates of the M.S.M.S. last September for indigents? The problem is acute due to the great increase in afflicted child cases, afflicted adult cases, and WPA cases. Full discussion. The Subcommittee on Relief Medicine was requested to continue its surveys and findings, and refer same to the Executive Committee of The Council at a later date.
10. *American Foundation Studies in Government.*—The Executive Secretary, at the request of Dr. Pino, presented a letter from Miss Lape of the Foundation asking about action of the M.S.M.S. House of Delegates re Mutual Health Service Plan of 1934. The Executive Secretary was in-

structed to send a transcript of the action of the House of Delegates regarding this plan.

11. *Infirmiry Hospital in Iron County.*—Dr. W. A. Manthei's report on Iron County Infirmiry Hospital was read, and a copy was ordered sent to the Crippled Children Commission for its information. Dr. Manthei was thanked for his help.
The Executive Secretary reported on the Crippled Children Commission's resolution of February 20: "That in any case where there are payments made for a committed State patient, through parent or guardian (referring to afflicted-crippled children cases) that the reimbursement to the State shall be paid in full before any additional payments are made to the hospital or to the physicians."
12. *Annual Meeting.*—The Executive Committee considered plans for the Annual Meeting and, after full discussion, a motion was made by Drs. Boys-Reeder that the next Annual Meeting be held the week of September 20, 1936. Carried unanimously. Motion of Drs. Heavenrich-Boys that the exact dates shall be September 21, 22, 23, 24, 1936. Carried unanimously. The Executive Secretary displayed the floor plan of exhibits, both technical and scientific, and reported progress on invitations to exhibitors and on the various details connected with the approaching meeting being worked out by the President, the Secretary, and the Executive Secretary.
13. *Maternal Health.*—The Executive Secretary asked advice about answering requests for information on this subject. He was instructed to refer all inquirers to their family physicians. Recommendation was made to Secretary Ekelund that he suggest to the larger county medical societies in his Secretary's letter that they develop plans for Mother's Day, such as radio talks, addresses to lay groups, etc., etc.
14. *Memberships.*—The matter of sending membership certificates each year to Honorary and Emeritus members was discussed, and on motion of Drs. Boys-Reeder was ordered done in 1936 and subsequent years. Carried unanimously.
15. *Approval of Bills.*—Miscellaneous bills, for the month of February, were presented by the Executive Secretary at the request of the Chairman of the Finance Committee, and on motion of Drs. Carstens-Boys were ordered paid. Carried unanimously.
16. *Appointment to Medico-Legal Committee.*—The President announced the resignation of Dr. F. B. Miner, Flint, from the Medico-Legal Committee, and his appointment of Dr. I. W. Greene of Owosso to fill this vacancy. This appointment was approved, on motion of Drs. Carstens-Boys. Carried unanimously.
17. *Mail Order Practice.*—The alleged mail order practice of a certain physician was reported to the Executive Committee. The full correspondence was read. Discussion. Motion of Drs. Carstens-Reeder that, in accordance with Chapter 9, Section 3, of the By-Laws of the M.S.M.S. this matter be referred to the County Medical Society for information, investigation, and full report and advice on action desired of the State Society. Carried unanimously.
18. *Cancer Committee Publicity.*—A letter of thanks was ordered sent to the Cancer Committee of the M.S.M.S. to the *Detroit News*, and to Mr. A. M. Smith for the excellent articles on Cancer recently published in the *Detroit News*.

19. *Adjournment.*—The Chair thanked all for their attendance and good advice on these many important items, and adjourned the meeting at 11:10 p. m.

MINUTES OF MEETING OF LEGISLATIVE COMMITTEE

Wednesday, March 17, 1936

1. *Roll Call.*—The meeting was called to order by Dr. H. H. Cummings, Chairman, at 7:25 P. M., in the Wayne County Medical Society Building, Detroit. Present were: Dr. Cummings of Ann Arbor, Dr. L. G. Christian of Lansing, Dr. L. J. Garipey of Detroit. Also present were: Drs. James H. Dempster and S. W. Insley of Detroit, and Executive Secretary Wm. J. Burns. Absent were: Dr. F. B. Burke of Detroit, Dr. Henry Cook of Flint, Dr. H. E. Perry of Newberry, and Dr. C. F. Snapp of Grand Rapids.

2. *Minutes.*—The minutes of the meeting of February 12, 1936, were read and approved.

3. The subcommittees reported on their several activities and the reports were accepted.

4. *Barbituric Acid Bill.*—The Executive Secretary reported on a bill covering barbituric acids, introduced into the Michigan Legislature in 1935.

5. *Advertising Eye Specialists.*—Dr. Burke was not present, so report on action of Wayne County Medical Society Board of Trustees, February 13, 1936, meeting, was postponed until the April meeting of the Legislative Committee.

6. *Afflicted-Crippled Persons' Laws.*—Dr. Garipey reported on activities of special committee which is studying recodification of these laws.

A report was given, showing that the total amount of sales tax collected from sale of drugs, cosmetics, etc., to June, 1934, was \$1,200,000; the estimate for 1935 is \$1,320,000; the estimate for 1936 is \$1,500,000—which is far short of the amount required for the care of the crippled and afflicted child. Earmarking may be possible under the law, but it is believed no legislature or Governor would lay themselves open to such a precedent. This report was accepted and placed on file.

7. *Relief Medicine.*—Dr. S. W. Insley gave a report on the work of his Sub-committee on Relief Medicine. He stated that it is trying to present findings in relation to the ERA, the afflicted-crippled child laws, the Social Security Act, etc., so that any proposal made by the Sub-committee will fit the entire picture. Discussion brought out the necessity for recodification of the State Welfare laws.

8. *Adjournment.*—The Chair thanked all for their attendance and help, and adjourned the meeting at 10:30 P. M.

MINUTES OF MEETING OF THE PUBLIC RELATIONS COMMITTEE

March 18, 1936.

1. *Roll Call.*—The meeting was called to order by Dr. L. Fernald Foster, Chairman, at 3:08 P. M., in the Hotel Olds, Lansing, Michigan. Present were Drs. L. Fernald Foster of Bay City, F. T. Andrews of Kalamazoo, E. I. Carr of Lansing, R. H. Holmes of Muskegon, F. B. Miner of Flint, P. A. Riley of Jackson, A. V. Wenger of Grand Rapids, and A. H. Whittaker of Detroit. Also present were Drs. Grover C. Penberthy, President, Detroit; C. T. Ekelund of Pontiac, Henry Cook of Flint, H. H. Cum-

mings of Ann Arbor, I. W. Greene of Owosso, T. K. Gruber of Eloise, S. W. Insley of Detroit, F. E. Reeder of Flint, and Executive Secretary Wm. J. Burns. Absent was Dr. J. J. Walch of Escanaba.

2. *Minutes.*—The minutes of February 16 were dispensed with on motion of Drs. Andrews-Carr. Carried.

3. (a) *Report of PRC Members.*—Each member reported on his work with integration of the filter system in his district.

(b) *Criticism of Filter System.*—Dr. Foster reported on adverse criticism of the filter system given by the director of a certain group of hospitals in Michigan. This was fully discussed.

4. (a) *Afflicted-Crippled Child Laws Problems.*—The Executive Secretary reported on the number of commitments during the last four months for afflicted children; on the Resolution of the Crippled Children Commission, made February 20, 1936, restoring Schedules A, B, C, D as of April 1, 1936; on its action of March 9, reiterating revival of these Schedules during April, May, June, 1936, for the purpose of trying out the filter system, the approval of this plan by the State Administrative Board, but its veto by the Governor on March 10. General discussion brought out the fact that any break-down of the filter system was due to inadequate economic investigations, and the undue enthusiasm of professional and amateur social workers in increasing the case load, and not because of any inadequacy of the medical filter. Dr. Cummings reported on the Wayne County cases which had been refused by the medical filter but subsequently were passed by the economic filter and received medical care at State expense. Motion of Dr. Carr, seconded by several, that this situation be reported to the Chairman (Judge McAvinchey) of the Michigan Probate Judges Association Committee, and to the PRC of the Wayne County Medical Society, with the view to correcting faulty economic filters. Carried unanimously. It was further recommended that this information should be passed on to the Governor and the Budget Director of the State. Report was given that the Governor, on March 17, 1936, recommended to the Commission that the hospital rates be cut 12 per cent off Schedules B and D, and that the physicians' compensation be cut 50 per cent off Schedules A and C. Dr. Cook stated that some decision must be made by the profession; it is important that the State cuts down its practice of medicine—this principle is more important than the fees. Full discussion resulted in the matter being referred to the Executive Committee of The Council.

(b) *Meeting with Probate Judges.*—Report was given on excellent joint meeting of the Bay County Medical Society and the probate judges of the northeast portion of Michigan.

(c) *Letters from Probate Judges.*—Chairman Foster presented 35 letters from probate judges, commenting on the work of the filter system in various counties of the State.

(d) *"Urgency" and "Necessity."*—Specifications of "urgency" and "necessity" were discussed by the Committee at length. Motion of Drs. Holmes-Carr that the PRC recommends multiple medical boards so that the majority opinion of the board would decide on the urgency and necessity of the cases presented to it. Carried unanimously.

5. *Brochures Against Socialization of Medicine.*—The Brief prepared at the request of the PRC for the information of physicians in connection with the debates on this subject was presented and read from cover to cover, word for word. Various corrections were made. Motion of Drs. Whittaker-

Andrews that the Brief as offered and corrected be adopted. Carried unanimously.

6. *Adjournment.*—Due to the lateness of the hour, other items on the agenda were deferred to the next meeting, called by Dr. Foster for April 8. The Chairman thanked the members and guests for their attendance and help, and adjourned the meeting at 6:35 P. M.

PRC CHAIRMEN OF THE COUNTY SOCIETIES

District	County Medical Society	PRC Chairman
16	Wayne Wayne	Dr. F. W. Stafford, 1111 Griswold, Detroit
2	Hillsdale	Dr. B. F. Green, Hillsdale
2	Ingham	Dr. L. M. Snyder, City Nat'l Bldg., Lansing
2	Jackson	Dr. J. E. Ludwick, 407 Carter Block, Jackson
2	Eaton	Dr. H. A. Moyer, Charlotte
7	Huron-Sanilac	Dr. C. B. Morden, Bad Axe
7	Lapeer	Dr. Clair Bishop, Almont
7	St. Clair	Dr. D. W. Patterson, Port Huron
3	Branch	Dr. H. R. Weidner, Coldwater
3	Calhoun	Dr. R. H. Fraser, Security Bank Bldg., Battle Creek
3	St. Joseph	(Not appointed)
14	Livingston	Dr. H. L. Sigler, Howell
14	Lenawee	Dr. O. Whitney, Adrian
14	Monroe	Dr. H. W. Landon, Monroe
14	Washtenaw	Dr. J. S. DeTar, Milan
4	Kalamazoo-Allegan-Van Buren	Dr. W. C. Huyser, 427 S. Burdick, Kalamazoo
4	Berrien	Dr. E. J. Witt, St. Joseph
4	Cass	Dr. L. S. Loupee, Dowagiac
5	Barry	Dr. E. T. Morris, Nashville
5	Ionia-Montcalm	Dr. H. M. Maynard, Ionia
5	Kent	Dr. A. B. Smith, Metz Bldg., Grand Rapids
5	Ottawa	Dr. J. G. Huizenga, Holland
13	Alpena-Alcona	Dr. F. J. O'Donnell, Alpena
13	Northern Michigan (Antrim-Charlevoix-Cheboygan-Emmet-Presque Isle)	Dr. Robert Armstrong, Charlevoix
8	Gratiot-Iasabella-Clare	Dr. C. F. Dubois, Alma
8	Midland	Dr. Joseph H. Sherk, Midland
8	Saginaw	Dr. R. S. Ryan, 623 S. Park St., Saginaw
8	Tuscola	Dr. R. R. Howlett, Caro
9	Grand Traverse-Leelanau-Benzie	Dr. L. R. Way, Traverse City
9	Manistee	Dr. E. A. Oakes, Manistee
9	Wexford-Kalkaska-Missaukee	Dr. L. E. Showalter, Cadillac
10	Bay-Arenac-Iosco-Gladwin	Dr. R. C. Perkins, Davidson Bldg., Bay City
10	O. M. C. O. R. O.	Dr. C. Keyport, Grayling
6	Clinton	Dr. Dean W. Hart, St. Johns
6	Genesee	Dr. F. B. Miner, 400 Sherman Bldg., Flint
6	Shiawassee	Dr. A. L. Arnold, Owosso
15	Macomb	Dr. W. J. Kane, Mt. Clemens
15	Oakland	Dr. C. T. Ekelund, Pontiac
11	Mason	Dr. L. G. Switzer, Ludington
11	Meosta-Osceola	Dr. G. Grieve, Big Rapids
11	Muskegon	Dr. A. F. Harrington, Peoples Bank Bldg., Muskegon
11	Oceana	Dr. V. Jensen, Shelby
11	Newaygo	Dr. W. H. Barnum, Fremont
12	Delta	Dr. A. S. Kitchen, Escanaba
12	Marquette-Alger	Dr. J. D. Crane, Ishpeming
12	Schoolcraft	Dr. A. G. Shaw, Manistique
12	Luce	Dr. E. H. Campbell, Newberry
12	Chippewa-Mackinac	Dr. S. H. Vegors, Sault Ste. Marie
17	Menominee	Dr. W. S. Jones, Menominee
17	Dickinson-Iron	Dr. E. M. Libby, Iron River
17	Gogebic	Dr. A. J. O'Brien, Ironwood
17	Ontonagon	Dr. C. Whiteshield, Trout Creek
17	Houghton-Baraga-Keweenaw	Dr. H. M. Joy, Calumet

COUNTY SOCIETIES

HURON-SANILAC

The following officers were elected for the coming year: President, W. J. Herrington, M.D., Bad Axe; vice president, F. O. Kirker, M.D., Snover; secretary-treasurer, C. W. Oakes, M.D., Harbor Beach.

INGHAM COUNTY

Annual Clinic

The Annual Clinic of the Ingham County Medical Society will be held in the Olds Hotel, Lansing, on Thursday, April 23, 1936.

The scientific program will begin at 1:30 P. M. Following are the guest speakers and their subjects.

1. Louis G. Herrmann, M.D., University of Cincinnati, Cincinnati, Ohio—"New Methods of Treatment of Endarteritis and other Vascular Diseases of the Extremities."
2. James G. Carr, M.D., Northwestern University, Chicago, Illinois—"Prognosis in Heart Disease."
3. Loyal Davis, M.D., Northwestern University, Chicago, Illinois—"Treatment of Wounds Involving the Peripheral Nerves."
4. Russell L. Haden, M.D., Cleveland Clinic, Cleveland, Ohio—"Blood Dyscrasias."

A social hour will be held at 5:00 P. M. in the Lansing City Club in the Olds Hotel. Dinner will be served at 6:30 P. M.

Clay R. Murray, M.D., Columbia University, New York, will give the address of the evening: "Ambulatory Treatment of Fractures."

All members of the Michigan State Medical Society are cordially invited to attend this interesting clinic, as guests of the Ingham County Medical Society. No registration fee.

NORTHERN MICHIGAN

The regular meeting of the Northern Michigan Medical Society was held at the Perry Hotel, Petoskey, February 13, 1936. Due to the stormy weather, the attendance was very small and so the president dispensed with the regular business and a round table discussion of various topics was held. Dr. Armstrong gave a very interesting account of the experiences of the fishermen and coast guardsmen in their attempts to save the lives of the various men involved. Dr. McMillan also told of his treatment of the coast guardsmen involved in the rescue. Drs. Van Leuven and Mast of Petoskey were appointed on the Program Committee for March.

The March meeting of the society was held at the Perry Hotel, Petoskey, on the twelfth. The meeting was called to order by President Engle. Correspondence was read and reports of committees were heard. Dr. Van Leuven and Dr. Mast then presented two cases for discussion and comment: Post-influenza encephalitis and Henoch's purpura. An interesting hour was spent in the discussion of these cases. Dr. Mayne was appointed on the Program Committee for April.

ERVIN J. BRENNER, M.D., *Secretary*.

WASHTENAW COUNTY

A regular meeting of the Washtenaw County Medical Society was convened at the Michigan Union at 6 P. M., Tuesday, February 11, 1936. Dr. H. H. Cummings presided in the absence of Presi-

dent Miller and Vice President Bell. Dinner was served to sixty-seven members. Eighty-seven attended the program which followed.

The minutes of the meeting of January 14 were approved as printed on the program.

Dr. W. J. Wright of the Board of Censors reported the applications of the following qualified physicians: A. A. Palmer, Chelsea; Sherwood B. Winslow, University Hospital; E. Thurston Thieme, University Hospital; H. B. Rothbart, University Hospital; Louise Schnute, University Hospital.

The report of the Board of Censors was accepted and the applicants elected to membership. Dr. John Wessinger, chairman of a Committee on Resolutions, presented a resolution concerning the late Dr. Louis Rominger. This resolution was adopted unanimously. Dr. John S. DeTar, chairman of Public Relations Committee, gave a progress report and urged members to discuss the problems of the care of indigent in the county among themselves and with members of the committee before the next meeting of the Society.

Dr. Cummings presented a suitably engraved rosewood gavel to Dr. O. R. Yoder as a token of appreciation of his administration as president of the Society during the year 1935 and of admiration of his qualities as physician and fellow-man.

A group of excellent papers on Pneumonia were read. Dr. Mark Marshall acted as chairman of the symposium. Dr. A. C. Curtis discussed "Newer Developments in Treatment." Dr. George Muehlig presented "Complications of Pneumonia" and Dr. Marshall concluded with "Prognosis." Dr. D. M. Cowie and Dr. Raphael Isaacs discussed the papers.

JOHN V. FOPEANO, *Secretary*.

THE WASHTENAW COUNTY MEDICAL FILTER SYSTEM

1. In accordance with an agreement made by the Michigan State Medical Society with the State Probate Judges' Association, the Crippled Children Commission, and the Michigan Hospital Association, the Washtenaw County Medical Society hereby offers the Judge of Probate the assistance of the profession through the medium of a medical examining board, in determining the need for hospitalization of indigent afflicted and crippled children under State Acts 274 and 236, as amended.

2. This examining group, to be known as the Medical Filter Board, shall consist of three or more physicians chosen from members of the Washtenaw County Medical Society who have indicated a willingness to serve. For the present, the term of service on the Board shall be six weeks, the terms being so arranged that one new examiner shall start every two weeks. The first Board, then, shall have one physician serving two weeks, one serving four weeks, and one the full six weeks' period. Members shall be appointed to the Board by the President, upon recommendation of the Public Relations Committee, all appointments to be approved by the Society.

3. There shall also be a Consulting Board, consisting of physicians, members of the Washtenaw County Medical Society, who limit their practices to the specialties, and who indicate a willingness to serve on such a Board. Opinion as to the necessity for hospitalization under the statutes may be asked of one or more members of this Consulting Board by the Medical Filter Board, in the manner herein-after described.

4. The activities of the Medical Filter Board and the Consulting Board shall be directed toward determining the need for hospitalization and for specialized medical treatment, their sole aim being to

render medical opinion for the guidance of the Judge of Probate.

5. Care of afflicted and crippled children under Acts 274 and 236 is restricted to the time of hospitalization. The hospitals in which these cases may be cared for are determined by the Crippled Children Commission.

Plan of Operation of the Medical Filter System

1. The Medical Filter Board shall meet once weekly, at 9 A. M. of each Friday morning, or at some other prearranged time, in the examining rooms designated by the Probate Court for the purpose of examining cases referred for examination by the Court. All physicians, and all other agencies interested in securing hospitalization of cases under the above Acts, must first refer said cases to the Probate Court, as examinations by the Board shall be made only on order by the Court. The Court will refer for examination only those cases which have passed the Economic Filter set up by the Court.

2. Patients shall bring to the examining rooms, the standard court form, No. 9532, filled out in duplicate, indicating provisional diagnosis and reason for hospitalization. After examination, the patient shall be returned to the Probate Court, along with recommendations of the Board. The original copy shall be sent to the Court, and the duplicate kept in the files of the Medical Filter Board.

3. If, in the opinion of the Board, additional consultation is required before hospitalization, the patient shall be referred to a specialist who is a member of the Consulting Board. If there are several consultants in one specialty, cases shall be referred to them in rotation, unless circumstances prevent. The patient shall take the standard court form, No. 9532, to the specialist, after the opinion of the Medical Filter Board has been added thereto. After examination, the specialist shall add his opinion for the guidance of the Judge of Probate, and return the patient to the Court with recommendations.

4. The Judge of Probate will then inform the physician who first referred the case whether or not hospitalization has been ordered by the Court. It is agreed between the Judge of Probate and the Washtenaw County Medical Society that each case is to be returned to the original referring physician, for him to arrange for hospitalization.

5. In emergency cases, hospitalized before authorization by the Court, the Court assumes no responsibility for the payment of hospital or physicians' bills until economic and medical investigation has been made. The physician and hospital caring for an emergency case, therefore, do so with this understanding. The Probate Court should be notified by telephone of every emergency hospital admission as soon as possible, and the standard Probate Court Physicians' Certificate forwarded to the Court. Whenever possible, case records, x-rays of fracture cases, and pathological reports on tissues excised in emergency operations, should be submitted for the assistance of the Medical Filter Board.

6. The policies of the Medical Filter Board shall be determined by the Washtenaw County Medical Society. The plan of operation may be amended at any regular meeting by a majority vote therefor, provided that such amendment has been read in open session at the preceding regular meeting and a copy of the same has been sent to each member by the Secretary, ten days in advance of the meeting at which final action is to be taken.

AMERICAN ASSOCIATION ON MENTAL DEFICIENCY MEETS

The American Association on Mental Deficiency composed of some 500 educators, psychologists, sociologists, and psychiatrists is holding its sixtieth annual meeting at the Hotel Jefferson, St. Louis, Mo., on May 1, 2, 3 and 4. The Friday sessions will be devoted to General and Sociological aspects of mental deficiency; the Saturday sessions to Psychological and Educational topics with special stress on Educational Disabilities. The Monday sessions will be given over to Research Activities, Medical Aspects and Administrative Problems in mental deficiency. Everyone interested in the mentally defective or retarded child is cordially invited to attend these sessions. The complete program may be obtained from the Secretary, Dr. Groves B. Smith, Godfrey, Illinois.

MEDICAL PERIODICAL LITERATURE

The manner of presentation of medical thought is a subject that interests the editors of medical periodicals at all times. It ought equally to interest those who prepare articles for periodicals. Writing for publication is not easy, nor, in most cases, does it come naturally. Even if it is a gift, that gift can be cultivated. The position of an editor, like that of Gilbert and Sullivan's policeman, "is not a happy one," at least not always! He feels impelled to make certain changes in a manuscript, the reasons for which are not understood by the writers, and so may give offense. While it is true that editors exist for the purpose of editing, their task could be rendered easier by attention to certain points on the part of the contributor. Much might be said on this subject, but we wish at the moment to direct attention to certain phases of it only.

The first desideratum in a medical paper is that the author should have something to say that is worth while. His paper should embody some advance in knowledge, some *new* discovery, some clinical experience, some unusual case. A paper of the "arm-chair" variety, while it may have value under certain circumstances, rarely deserves to be embalmed in the pages of a medical journal.

Titles should not be too lengthy. In the Middle Ages, and even later, titles frequently amounted to an epitome of the book. In the cases of medical monographs one wonders sometimes whether it was necessary to append the article. A summary at the end will meet the requirements. A title, though brief, may yet convey clearly the subject under discussion. Remember, the title is to be indexed. If it is not properly expressive the paper concerned might as well be consigned to oblivion.

Further, we deprecate the practice of writing in a "telegraphic" style. This may be all right in a hospital case report, but is not all right in a medical periodical that has any pretensions. Leaving out the definite article is the most flagrant example of this fault. Do not take the daily newspapers as your model.

We ask our prospective contributors to think on these things. And remember, oh remember, to double space your articles.—*Canadian Medical Association Journal*.

WOMAN'S AUXILIARY

MRS. A. M. GIDDINGS, President, 22 Riverview Ave.,
Battle Creek

MRS. KENNETH LOWE, Secretary-Treasurer, 107 Elizabeth St., Battle Creek

MRS. L. C. HARVIE, Press Chairman, 341 Brockway Place, Saginaw



MRS. K. H. LOWE
Secretary-Treasurer Woman's Auxiliary
of the Michigan State Medical Society

Dear County Presidents and Auxiliary Members:

The mid-year meeting of our executive board was held at the Hotel Statler, in Detroit, Saturday morning, February 15. Six members of the board were present, and two county presidents, Mrs. Wm. Dugan, of Battle Creek, and Mrs. Frank Hartman, of Detroit.

There was quite a full discussion of the financial condition of our organization, and the revision chairman, Mrs. J. H. Dempster, was instructed to draw up some changes in the by-laws; these to be presented to the general assembly at the annual convention in September. We are still operating on the reduced income instituted as a "depression" measure, and no immediate change in this regard is anticipated.

Our organization chairman, Mrs. J. A. McLandress, submitted an encouraging report of one new auxiliary unit already formed, and others in the course of organization. There has been much activity in the way of correspondence in this department during the year.

Mrs. L. O. Geib gave a report of the recent survey conducted by the Public Relations department to ascertain the strength of auxiliary influence in lay organizations. While the response from all units was not complete, the information received showed that our members are very active in a wide range of civic and social enterprises. In this fact lies our greatest strength, i.e., the formation of public opinion, and the correction of false impressions concerning the aims of public health service, and the problems and ideals of the medical profession.

There has been better coöperation this year than before in the use of our auxiliary pages of THE

JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY, but Mrs. L. C. Harvie, press chairman, feels that still the whole story is not being told. She again urges that all items of interest concerning meetings, activities, and projects of the various county units be sent in promptly.

After routine reports the meeting adjourned and the members joined the Wayne County Auxiliary in the subscription luncheon, at which the speaker for the afternoon, Dr. Lawrence A. Pomeroy, of Cleveland, was a guest.

Our next important activity is the national convention in Kansas City, Mo., May 11-15. It is to be hoped that Michigan will have a full representation at that meeting.

Sincerely,
(MRS. A. M.) LEAH M. GIDDINGS

County News

Calhoun County.—The Werstein Memorial Nurses' Home, at Leila Hospital, was the scene Tuesday evening, March 3, of one of the most delightful social affairs of the season, when wives of the doctors of Calhoun County were guests at a 6:30 dinner given by Leila Hospital.

In stressing "service" as the keynote of his address, the Rev. Carleton Brooks Miller, of the First Congregational Church, who was the special speaker and guest of the evening, traced the early struggle of Leila Hospital, what it had accomplished during its few years of existence, and brought out just what the hospital now means to the community. The Rev. Mr. Miller urged the women to continue their service in the worthy work which they are doing for both hospitals in the city.

In closing, he said that, through the auxiliary to the Calhoun County Medical society, the Sisters of Mercy of Leila Hospital were inviting the women of Calhoun County at large, regardless of creed or affiliation, to become associated for the main purpose of service and thus form an auxiliary to Leila Hospital.

Mr. Miller was introduced by Mrs. Wm. M. Dugan, president of the Calhoun County auxiliary, and after his talk, Mrs. M. Phillipson, of Dowagiac, who was also a special guest of the evening, was introduced by Mrs. Dugan. Mrs. Phillipson gave interesting data concerning the work being accomplished by the hospital auxiliary in Dowagiac, stressing that with a membership of 225 the auxiliary had already raised \$20,000 for its hospital and was developing a small private hospital into one of the well equipped hospitals of the county.

Mrs. A. M. Giddings, state president of the auxiliary to the Medical Society, spoke, announcing that this district may be the first in the country in the distribution of *Hygeia*. The magazine has been placed in all rural and community schools in the county.

Mrs. H. M. Lowe, chairman of maternity kits, announced that during the past year more than 500 maternity kits had been made and distributed by the auxiliary.

A program of musical numbers was given by the nurses, which was greatly enjoyed by the members.

Lois M. Upson,
Press Chairman.

* * *

Kalamazoo County.—Mrs. S. W. Robinson, Benjamin Avenue, entertained members of the Women's Auxiliary, Academy of Medicine, at a coöperative dinner Tuesday evening in the White Cross House, Bronson Hospital. Covers were laid for twenty-seven and potted plants were used decoratively.

After dinner, Mrs. Robinson took members on a

tour of the house and explained the use being made of it. The later evening was spent informally. Mrs. Robinson was assisted by Mrs. Leo. Westcott, Mrs. W. O. Jennings, and Mrs. W. D. Irwin.

WILMA G. DOYLE,
Press Chairman.

* * *

Saginaw County.—The "Bring-Your-Husband Dinner," held early in February, took the place of the regular monthly meeting of the Auxiliary to the Saginaw County Medical Society.

However, members of this unit have been active during the month in spreading the health gospel. At a meeting of one of the women's clubs, a paper was given by an auxiliary member on "The Wisdom of the Body," and members of the Medical Auxiliary, who are also members of this club, brought interesting articles for exhibition, among which were specimens of various natures, x-ray films and colored plates in a lighted cabinet. Much interest was shown by the laity. Also exhibited were pamphlets put out by the A. M. A., on "Patent Medicines," et cetera.

DELTA A. HARVIE,
Press Chairman.

* * *

Wayne County.—Three outstanding events have been sponsored recently by the Woman's Auxiliary to the Wayne County Medical Society. On January 10 at the Statler Hotel, Dr. Samuel Gordon, secretary of the Council on Dental Therapeutics of the American Dental Association, spoke under the direction of the Public Relations Committee of which Mrs. Frederick T. Munson is chairman. Dr. Gordon discussed "Paying through the Teeth," and this was an open meeting since it is the policy of the Auxiliary to contact the public with three lectures each year on timely subjects. A subscription luncheon honoring the speaker preceded the talk, at which time officers of the newly organized Dental Auxiliary were also introduced.

The second of the series with Dr. L. A. Pomeroy of Cleveland, member of the American Society for the Control of Cancer, speaker, was held February 15. A group from the Executive Board of the State Auxiliary with the speaker were honor guests at a similar luncheon preceding the meeting. At each session a *Hygeia* exhibit was displayed.

The third annual Arts and Crafts Exhibit was held March 8-13 inclusive under the direction of Mrs. James H. Dempster, Art Chairman, with Mrs. Milton Vokes, co-chairman. Any member of the Wayne County Medical Society or member of his family was urged to exhibit his handicraft and the results as displayed were most gratifying. On Sunday from three to six, a tea was given with Dr. Wilfrid Taylor Dempster of the University of Michigan faculty giving an illustrated talk on "The Development of Medical Illustrating" in which he traced the crude illustrations of the early ages down to the well developed technic of the present day. Mrs. Jack Agins was in charge of the music furnished by a string ensemble from the Doctors' Symphony Orchestra and tea and a social hour followed.

Friday, the regular meeting day of the Auxiliary as well as the final day of the exhibit, featured a reception to between sixty and seventy new members at which time Paul Honore, well known Detroit artist, discussed "Laity Looks at Art." Music and tea concluded the afternoon's program.

The Auxiliary takes pride in announcing that they have put a subscription to *Hygeia* in more than 335 schools in the metropolitan area.

WINOGENE E. DARLING,
Press Chairman.

CORRESPONDENCE

NOT SO KAKAPHONIOUS

To the Editor of the
Michigan State Medical Society:

In the current medical literature the word "hypophysectomized" is used quite frequently, and is such an awkward word to pronounce that it occurred to me the word "pitectomized" would be more euphonious and time-saving in writing. What think you?

—Reader.

February 28, 1936.

"CALIFORNIA DOINGS"

Editor Dempster:

Agreeable to the promise made to you in November to send you a report from time to time I am embracing this, my first opportunity to send you a few comments on our Medical Association activities.

I have just completed visiting every county unit, attending a regular meeting of each county society. This entailed train and auto travel of some 23,000 miles in a period of twelve months. These visits were made for the purpose of becoming oriented, ascertaining local conditions and problems and presenting to our members the policies and objectives of the State Association. The values of these visits is becoming apparent in awakened interest on the part of county societies, individual members and local committees. The year 1935 closed with a net gain of 333 members, bringing our total to 5,402 members. This number represents 83.3 per cent of the licensed physicians and surgeons in the state eligible for membership. We are well on our way toward attaining our 1936 goal of 6,000 members. It has been a delightful experience to meet these splendid men and to survey their environments. I could narrate at length most interesting facts that would give insight to these medical men and their ideals and standards. Space will not permit, hence for this time I quote a paragraph from a letter of Dr. Richard R. Smith of Grand Rapids following a recent visit during which he took the time to peer behind our scenes:

"After leaving San Francisco Mrs. Smith and I went to Southern California, gaining impressions of the country in general and medical conditions in particular. Incidentally, we met a great many old friends and had a thoroughly enjoyable and profitable time. I came home with renewed and fresh impressions of the excellence of the profession out there. Certainly your standards are as high as any in the country and far better than in most parts of the country, and I think all of you there can be well satisfied with what you are doing. There is a certain newness and freshness, a tendency to break away from restricting traditions, and an enterprising spirit which is very apparent to one who visits California after a period of years."

I wish that it were possible to describe in detail all of our Association activities. That also is impossible on account of space. I must be content to simply record a few of the outstanding features.

1. Secured a Court of Appeals sustaining order granting an injunction restraining county supervisors from admitting to county hospitals persons who are not indigent.

2. Secured, on appeal, ruling from a higher court that the practice of medicine by corporations is illegal.

3. Initiated action and presented arguments and briefs to declare that the administering of an anesthetic constituted the practice of medicine and that none but a licensed physician and surgeon can administer an anesthetic. We are awaiting the court's decision. If this principle could be universally established, physicians would be attracted to this special field, for lay and nurse competition would be removed.

4. Assumed responsibility and direction of a Hall of Medical Science at the San Diego Exposition that opened February 12 and closes September 9. This building with its 22,000 square feet of exhibit space contains state and national exhibits on scientific medical subjects designed to impart to the several million exposition visitors dependable information upon the problems of public health and private health.

Incidentally, our Association has assumed direction and administration of the Hall of Medical Science that will be built for the San Francisco Exposition two years hence.

5. Initiated a state-wide program of post-graduate conferences for our members.

6. Protection against malpractice suits has become a serious problem. There has been a 300 per cent increase in the number of suits filed. Insurance Companies' policy premiums are 100 to 150 per cent higher than in Michigan. An insurance broker has been retained and plans are being made to rectify the situation. These will be reported on at our Annual Meeting in May.

7. Initiated a program of Public Health Institutes to be conducted throughout the State for the purpose of public education.

8. The last legislature passed a law authorizing non-profit corporations to sell hospital insurance. The Association has enunciated the principle and adopted the policy that the examinations made in the x-ray laboratories as well as those of the pathological and physiotherapy departments were not a part of hospital care or service. It is further held that these services constitute the practice of medicine and therefore technicians and hospitals cannot provide these services under a hospital insurance policy, for to do so would constitute illegal practice by the technician and corporate practice on the part of insurance companies or hospitals. It is held that in the x-ray department highly dangerous radiant energy is employed and in the pathological department human tissue is penetrated, therefore these procedures should be under the immediate supervision of a licensed graduate in medicine.

It is desirable that many eastern hospitals and medical organizations take a similar position and end illegal practices and inroads into the medical field by lay technicians and hospitals. That is a form of state medicine that is expanding and condoned, to professional injury in many eastern localities and metropolitan centers. California's profession has clarified its policies in the position it holds in regard to this vital question.

9. Our Annual Meeting will be held in Del Coronado, just across the Bay from San Diego, the week of May 24, 1936. The headquarters hotel, accommodating 1,000 members, was all reserved by members on December 1st. San Diego affords ample facilities for the some 2,500 registrations that will be recorded. More about the Annual Meeting and some of its unique features, if you wish, when the minutes of that Session are recorded.

10. Our four medical colleges afford splendid opportunity for our members to remain abreast of scientific progress. Special lectures and courses are frequently given. Faculty members gladly respond to invitations to appear on county and district programs, thereby presenting meetings that are of exceptional value and interest.

In closing, I must not fail to comment upon our weather. Though we had an "unusual" amount of rain, the rainy season is over. Its discomforts were trivial in comparison to your heavy fall of snow and zero temperatures. Days now are bright and sunny, verdant hills and trees in blossom bloom—windows are open—it's balmy spring and delightful.

With cordial greetings to all the members in Michigan, I am

Sincerely,

F. C. WARNSHUIS.

OBITUARY

Dr. Edwin M. Chauncey

Dr. Edwin M. Chauncey of Albion died February 20, 1936, at the Sheldon Memorial Hospital in Albion. Dr. Chauncey was born December 8, 1873, at Girard, Branch County, Michigan. He was a graduate of the University of Michigan Medical School. After graduation, he practiced at Girard where his father was also a physician, later coming to Albion. The cause of his death was pneumonia.

He was very active in civic affairs of his city. For many years he served on the Albion school board from 1926 to 1929. During the World War he was a lieutenant in the medical corps. Dr. Chauncey was a member of the Calhoun County Medical Society, the Michigan State and American Medical Associations. He is survived by his widow, Mrs. Myrtle Chauncey, and one son, Richard M. Chauncey of Detroit.

Dr. A. M. Barrett

Dr. Albert Moore Barrett, head of the department of psychiatry and director of the state psychopathic hospital, Ann Arbor, died April 2, 1936, at his home of a heart attack following an automobile accident when returning from Detroit.

Dr. Barrett was born at Austin, Illinois, in 1871. He received his preliminary education at the Iowa State University, where he was graduated A.B. in 1893, and received his M.D. in 1895. He was assistant physician and pathologist of the Independence, Iowa, Hospital for the Insane in 1897-98, holding a similar position, 1898-1901, in the Hospital for the Insane at Worcester, Massachusetts. He became assistant neuropathologist at Harvard Medical School in 1906. Prior to his appointment, he pursued post-graduate work at Heidelberg University. Dr. Barrett came to Ann Arbor in 1906 and had occupied the position as professor of psychiatry at the University of Michigan Medical School, up to the time of his death. Dr. Barrett was a member of the American Medical Association, the American Psychiatric Association, of which he was president in 1922, and the American Neurological Association. He was the author of numerous papers on psychiatry. He is survived by his son, Edward B. Barrett, who graduated from the Law School, and by three sisters and a brother living on the Pacific Coast.

MICHIGAN'S DEPARTMENT OF HEALTH

C. C. SLEMONS, M.D., Dr.P.H., Commissioner

LANSING, MICHIGAN

Approved Laboratories

The Michigan Department of Health is required by statute to check the accuracy and dependability of laboratories making examinations in the control of communicable diseases. The following laborato-

ries have complied with the regulations and have been approved for the serodiagnosis of syphilis and microscopy in the laboratory diagnosis of diphtheria, tuberculosis, and gonococcic infections, in the State of Michigan:

<i>Reg. No.</i>	<i>Name of Laboratory</i>	<i>Location</i>	<i>Director</i>
5	St. Joseph's Mercy Hospital.....	Ann Arbor.....	S. C. Howard, M.D.
6	Univ. of Michigan Hospital.....	Ann Arbor.....	R. L. Kahn, Sc.D.
175	Chemical & Bact. Laboratory.....	Battle Creek.....	Wm. Rothberg
11	L. Y. Post Montgomery Hosp.....	Battle Creek.....	A. A. Humphrey, M.D.
13	City Health Department.....	Bay City.....	L. B. Harrison
14	Mercy Hospital.....	Bay City.....	W. G. Gamble, M.D.
191	Gamble Clinical.....	Bay City.....	W. G. Gamble, M.D.
170	Mercy Hospital.....	Benton Harbor.....	H. L. Galehouse
166	Dearborn Clinical.....	Dearborn.....	C. A. Christensen, M.D., H.O.
183	Ford Mtr. Co. Medical.....	Dearborn.....	B. D. Campbell, M.D.
195	C. D. Brooks, M.D.....	Detroit.....	C. D. Brooks, M.D.
100	H. L. Clark Clinical.....	Detroit.....	H. L. Clark, M.D.
140	Chas. Godwin Jennings Hospital.....	Detroit.....	S. W. Wallace, M.D.
184	Chenik Hospital.....	Detroit.....	O. A. Brines, M.D.
18	Children's Hospital.....	Detroit.....	M. K. Patterson, M.D.
1	Department of Health.....	Detroit.....	J. A. Kasper, M.D.
164	Detroit Endo. & Clinical.....	Detroit.....	J. J. Zimmerman, M.D.
17	Delray Gen'l Hospital.....	Detroit.....	H. E. Cope, M.D.
185	Detroit Polyclinic.....	Detroit.....	R. G. Gillespie
189	East Side Gen'l Hospital.....	Detroit.....	O. A. Brines, M.D.
113	Evan. Deaconess Hospital.....	Detroit.....	A. B. Pranian
136	Florence Crittenton Hospital.....	Detroit.....	A. L. Amolsch, M.D.
21	Grace Hospital.....	Detroit.....	C. I. Owen, M.D.
73	Harper Hospital.....	Detroit.....	P. F. Morse, M.D.
188	Jefferson Clinic.....	Detroit.....	O. A. Brines, M.D.
176	H. Havers.....	Detroit.....	H. Havers, M.D.
22	Henry Ford Hospital.....	Detroit.....	F. W. Hartman, M. D.
142	Medical Clinical.....	Detroit.....	N. E. Aronstam, M.D.
23	H. A. Meinke.....	Detroit.....	H. A. Meinke, M.D.
24	National Pathological.....	Detroit.....	F. J. Eakins, M.D.
157	Nottingham Clinical.....	Detroit.....	Harriet B. Ainslie
25	Owen Clinical.....	Detroit.....	R. G. Owen, M.D.
26	Physicians' Service.....	Detroit.....	M. S. Tarpinian
27	Providence Hospital.....	Detroit.....	J. E. Davis, M.D.
28	Receiving Hospital.....	Detroit.....	O. A. Brines, M.D.
31	St. Joseph's Mercy Hosp.....	Detroit.....	D. G. Christopoulos, M.D.
32	St. Mary's Hospital.....	Detroit.....	J. E. Davis, M.D.
76	R. L. Schaefer.....	Detroit.....	R. L. Schaefer, M.D.
181	Frank Stafford.....	Detroit.....	Frank Stafford, M.D.
117	Woman's Hospital.....	Detroit.....	D. C. Beaver, M.D.
97	Seymour Hospital.....	Eloise.....	S. E. Gould, M.D.
36	Hurley Hospital.....	Flint.....	G. R. Backus, M.D.
112	Women's Hospital.....	Flint.....	G. R. Backus, M.D.
190	Gamble Clinical.....	Grand Rapids.....	W. G. Gamble, M.D.
167	Allergic & Clinical.....	Grand Rapids.....	H. G. Swenson, M.D.
38	Blodgett Memorial Hospital.....	Grand Rapids.....	W. M. German, M.D.
40	Brotherhood Private.....	Grand Rapids.....	J. S. Brotherhood, M.D.
37	Butterworth Hospital.....	Grand Rapids.....	W. M. Stevenson, M.D.
41	St. Mary's Clinical.....	Grand Rapids.....	G. L. Bond, M.D.
42	Western Michigan Clinical.....	Grand Rapids.....	T. L. Hills, Ph.D.
2	Western Mich. Div. Mich. Dept. Health.....	Grand Rapids.....	Pearl Kendrick, Sc.D.
192	A. R. Hufford.....	Grand Rapids.....	A. R. Hufford, M.D.
116	Cottage Hospital.....	Grosse Pointe.....	P. F. Morse, M.D.
94	Department of Health.....	Hamtramck.....	P. A. Klebba, M.D.
44	General Hospital.....	Highland Park.....	P. F. Morse, M.D.
3	Branch Lab., Mich. Dept. Health.....	Houghton.....	Ora M. Mills
193	Itzov Clinical.....	Iron Mt.....	Theo. A. Itzov
146	City Health Department.....	Jackson.....	E. J. MacLachlan, D.V.M., H.O.
186	W. A. Foote Mem. Hospital.....	Jackson.....	Ethel Mae Kennedy
91	Bronson Methodist Hospital.....	Kalamazoo.....	H. R. Prentice, M.D.
47	Dept. of Public Health.....	Kalamazoo.....	George White
46	New Borgess Hospital.....	Kalamazoo.....	H. R. Prentice, M.D.
163	Larkum Clinical.....	Lansing.....	N. W. Larkum, Ph.D.
0	Mich. Dept. of Health.....	Lansing.....	C. Young, D.P.H.
69	St. Lawrence Hospital.....	Lansing.....	C. D. Keim, M.D.
134	St. Lukes Hospital.....	Marquette.....	W. B. Lunn, M.D.
141	Diagnostic Clinic.....	Monroe.....	C. J. Golinvaux, M.D.
104	Mercy Hospital.....	Monroe.....	R. W. McGeoch, M.D.
187	Monroe Hospital.....	Monroe.....	C. K. Neher, M.D.
51	Macomb County.....	Mt. Clemens.....	S. J. Peltier
50	St. Joseph Hospital.....	Mt. Clemens.....	Isabella Kennedy
54	Mercy Hospital.....	Muskegon.....	A. A. Spoor, M.D.
118	Pawating Hospital.....	Niles.....	Alice Gracy, M.D.
111	Wm. H. Maybury San.....	Northville.....	C. E. Woodruff, M.D.
56	Dept. Health & Gen'l Hosp.....	Pontiac.....	A. C. Neafe, M.D.
57	Oakland County Health Dept.....	Pontiac.....	J. D. Monroe, M.D., H.O.
128	Pontiac State Hospital.....	Pontiac.....	R. E. Olsen, M.D.
58	St. Clair County.....	Pt. Huron.....	Lucile Roach
83	Dept. of Health.....	Roseville.....	F. T. Zieske, M.D.
59	Central Laboratory.....	Saginaw.....	O. W. Lohr, M.D.
168	Hart Clinic.....	St. Johns.....	T. Y. Ho, M.D.
108	Clinton Mem. Hospital.....	St. Johns.....	T. Y. Ho, M.D.
154	Chippewa Co. War Mem. Hosp.....	Sault Ste. Marie.....	C. Willison, M.D.
182	Sturgis Mem. Hospital.....	Sturgis.....	D. M. Kane, M.D.
62	Traverse City State Hospital.....	Traverse City.....	R. P. Sheets, M.D.
63	Wyandotte Gen'l Hospital.....	Wyandotte.....	C. M. Crum

MICHIGAN'S DEPARTMENT OF HEALTH

No. Reg.	Name of Laboratory	Location	Director
4	City Laboratory.....	Ann Arbor.....	J. A. Wessinger, M.D., H.O.
129	Dept. Ped. & Inf. Dis. Univ. Mich.....	Ann Arbor.....	D. M. Cowie, M.D.
127	University Health Service.....	Ann Arbor.....	W. E. Forsythe, M.D.
10	City Health Department.....	Battle Creek.....	Henry Kowalk
147	Hess Clinical.....	Bay City.....	C. L. Hess, M.D.
137	Jones Clinic.....	Bay City.....	L. B. Harrison
143	Eye, Ear, Nose & Thrt. Hosp.....	Detroit.....	W. F. Hamilton, M.D.
102	North End Clinic.....	Detroit.....	Ruth McKinney, Ph.D.
34	St. Francis Hospital.....	Escanaba.....	H. T. Defnet, M.D., H.O.
35	Board of Health.....	Flint.....	Jean Bradford
124	Michigan State Sanatorium.....	Howell.....	Mary Joy
43	Grand View Hospital.....	Ironwood.....	W. H. Wacek, M.D.
45	Mercy Hospital.....	Jackson.....	Virginia Lauzun
48	State Hospital.....	Kalamazoo.....	R. A. Morter, M.D.
121	Edw. Sparrow Hospital.....	Lansing.....	N. W. Larkum, Ph.D.
125	Mich. Home & Tr. School.....	Lapeer.....	R. L. Dixon, M.D.
126	Morgan Hgts. Sanatorium.....	Marquette.....	S. Lojaco, M.D.
53	Hackley Hospital.....	Muskegon.....	E. W. Lange, M.D.
123	Wayne Co. Training School.....	Northville.....	R. H. Haskell, M.D.
55	Olivet College.....	Olivet.....	G. F. Forster, Ph.D.
107	Memorial Hospital.....	Owosso.....	I. W. Greene, M.D.
66	Petoskey Hospital.....	Petoskey.....	D. C. Burns, M.D.
132	St. Joseph Mercy Hospital.....	Pontiac.....	R. E. Olsen, M.D.
150	State Hospital.....	Ypsilanti.....	G. F. Inch, M.D.

The above laboratories have complied with the regulations and have been approved for the microscopy in the laboratory diagnosis of diphtheria, tuberculosis, and gonococcic infections:

A supplementary list of approved laboratories will be published as soon as the records have been completed.

The provisional death rates for 1935 indicate that a new low has been established in tuberculosis. There were 2,045 deaths from this disease reported, as compared with 2,199 in 1934. While it is very difficult to establish rates on account of the fluctuation of the population in the ten-year interim of the Census, the figures given out by the Bureau of the Census for the population of Michigan in 1934 made a rate of 43.2 per 100,000 of population for tuberculosis. The Bureau of the Census has indicated that the same population estimate will be used for 1935, in which case the rate would be only a shade over 40 per 100,000. A number of years ago the objective in tuberculosis control set up by public health workers was to reach a rate of 40 by 1940. It would appear that Michigan has reached that objective four years ahead of time.

Another new low was established in typhoid fever, there being only 34 deaths from this cause, as compared with 65 deaths in 1934, a reduction of nearly one-half. A comparison of this number with 157 deaths in 1925, 353 deaths in 1915, and 636 deaths in 1905 certainly makes a very satisfactory showing.

Diphtheria made a slight increase from thirty-eight deaths recorded in 1934 to fifty-seven in 1935.

The year 1935 was distinctly an epidemic year for measles with 184 deaths reported. It is hoped that this disease will follow its usual course of periodicity and that we will not have another epidemic for at least three years.

One striking item revealed by the 1935 figures is the increase in pneumonia. The year 1933 showed 2,756 deaths from pneumonia (all forms). In 1934 this had risen about 20 per cent to 3,466, and 1935 shows a further rise to 3,805 deaths, an increase of about nine per cent over the 1934 figures. In view of the fact that no widespread epidemic of influenza or reportable upper respiratory infections existed, this sharp increase in pneumonia in the last two years is unexplainable.

Slightly increased rates are shown in epidemic meningitis and in poliomyelitis, but decreased in scarlet fever and whooping cough.

The figures given here are provisional but will probably not undergo significant changes when complete.

Women's Classes

Dr. Shebesta began a new series of women's classes in St. Clair County, February 24, which will continue for eight weeks.

Dr. Stocking is conducting a series of women's classes in Ionia County which will be followed by a series of classes in Washtenaw County beginning March 9.

Child Care Classes

Miss Fox began a series of child care classes in Gogebic County, February 3.

Miss Cooper began a new series of child care classes in Macomb County, February 5.

Miss Clock began a new series of classes in Tuscola County, February 17.

Growth Arrest in Long Bones as Result Of Fractures that Include the Epiphysis

During the seven and one-half years since the opening of the clinics at the University of Chicago, Edward L. Compere, Chicago (*Journal A. M. A.*, Dec. 28, 1935), has seen a group of cases showing deformities that developed as a result of fractures that crossed the epiphyseal cartilage and produced partial or complete growth arrest. Patients treated for fractures of the long bones reached a total of 693, with a total number of 819 fractures; 211, or 34 per cent of the total number of fracture cases studied, were in children 14 years of age or younger at the time the fracture occurred. In this group of children were 290, or 35 per cent of the total number of fractures. In thirty-seven of the 211 cases, the fracture involved the growth cartilage. In this group of thirty-seven patients there were forty-two such fractures, an incidence of 14.4 per cent of all the fractures in children. Of this number, eight were old fractures admitted because of deformity due to arrest of growth. Three of the eight had been compound fractures, so that the growth cartilage was injured by the infection as well as by trauma from the fracture. Of the entire group of forty-two fractures, five were complicated by infection, in all of which growth was arrested. There were thirty-three fractures in which the epiphyseal cartilage was involved but were too recent to show deformity at the time of the first admission. It was possible to secure an adequate roentgen follow-up examination in only nineteen of these. Of the nineteen, eighteen have shown definite growth arrest, an incidence of 95 per cent. The most common fracture to extend across the epiphyseal line into the epiphysis was that of the distal end of the humerus, while the bone that was least often injured in this way was the ulna.

GENERAL NEWS AND ANNOUNCEMENTS

The One Hundred Per Cent Club of the Michigan State Medical Society

1. Ingham County Medical Society
2. Luce County Medical Society
3. Muskegon County Medical Society
4. Oceana County Medical Society
5. Ontonagon County Medical Society

The above county medical societies have paid dues in full for each and every member of the County and State Medical Society.

Graduate Course for Physicians

The W. K. Kellogg Foundation has invited the 350 physicians in the counties of Allegan, Barry, Branch, Calhoun, Eaton, Hillsdale, and Van Buren to be its guests for a postgraduate course at Washington University School of Medicine, St. Louis, Mo. The work will begin on Monday, April 13, and continue daily for two weeks. The instruction will be given at the Washington University Medical Center, which includes the School of Medicine, the St. Louis Children's Hospital, the Barnes Hospital, the St. Louis Maternity Hospital, the McMillan Eye, Ear, Nose and Throat Hospital, and the Washington University Clinics.

The course will be a practical one adapted to the every-day needs of the general practitioner. Work will begin each morning at 8:30 and will continue until 5:00 P. M. It is anticipated that 125 physicians will be able to leave their practices this year to take advantage of this opportunity; those unable to attend this year will be invited to next year's course. The group of physicians will leave from Battle Creek by special train on Sunday, April 12. In St. Louis, they will be quartered at the Kings-Way Hotel, where a farewell banquet will be held on Friday, April 24.

Twenty-two members of the faculty will present lectures in pediatrics, internal medicine, surgery, obstetrics, otolaryngology, ophthalmology, stomatology, physical therapy, and radiology.

The work of the W. K. Kellogg Foundation in supplying postgraduate instruction to general practitioners is highly commended. It should stimulate other Foundations to similar endeavor.

* * *

The Filter System was created as of October 30, 1935.

* * *

The names of the presidents and secretaries of all the fifty-three county medical societies are published each month in THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY. Find them on page xvi.

* * *

The Medical History of Michigan, in two volumes, may be ordered by mailing a post card to the Michigan State Medical Society, 2020 Olds Tower, Lansing. Price \$2.50 per volume.

* * *

The dramatized radio programs of the A.M.A. are presented Tuesday afternoons at 5:00 o'clock E.S.T. over the N.B.C. network. They are well worth hearing. Tell your patients.

Afflicted Child Commitments: July, 1935—1,959; Aug., 1935—1,981; Sept., 1935—1,503; Oct., 1935—1,378; Nov., 1935—847; Dec., 1935—859; Jan., 1936—1,494 (net 863); Feb., 1936—1,039 (824 to miscellaneous hospitals, 215 to University Hospital).

* * *

In 1928, the Detroit meeting of the Michigan State Medical Society attracted 831 active members.

In 1936, it is estimated that over 2,000 will register. Be there!

* * *

Dr. I. W. Greene of Owosso has been appointed to the Executive Board, Medical Defense Committee of the Michigan State Medical Society, to fill the unexpired term of Dr. F. B. Miner, Flint, resigned.

* * *

The Michigan State Medical Society Annual Meeting will be held at the Book-Cadillac Hotel, Detroit, September 21, 22, 23, 24, 1936. It is anticipated that upwards of 2,000 will register. Get your hotel reservations now.

* * *

The Brief "Who Wants Socialized or State Medicine!" will be presented to the Executive Committee of The Council for final approval and dissemination in April. A copy will be sent to every member of the Michigan medical profession.

* * *

As of March 13, the SERA case loss for Michigan was 77,611, compared to 74,351 as of February 14, and 69,000 cases in January; the total on WPA as of March 13 was 102,367, compared to 96,610 on February 21, and 101,000 cases in January.

* * *

When you take care of a crippled or an afflicted child, you are not alone being paid a greatly reduced fee, but you are potentially liable for a malpractice suit. Read Pepke versus the Grace Hospital, 130 Michigan 493 (90 N. W. 278), or Downes versus Harper Hospital, 101 Michigan 565 (60 N. W. 42).

* * *

The Annual Meeting of the Michigan State Medical Society was last held in Detroit in 1928. Since that date meetings have been held as follows: 1929, Jackson; 1930, Benton Harbor; 1931, Pontiac; 1932, Kalamazoo; 1933, Grand Rapids; 1934, Battle Creek; 1935, Sault Ste. Marie.

* * *

Coroner's case: Recently, a Michigan physician was asked by an undertaker to sign a death certificate for a patient whom the physician had not seen for three years! The law states that unless the physician has been called within thirty-six hours prior to the patient's death, the case is a coroner's case.

* * *

County medical societies: Have you any new arrangements in your county for medical care of indigents, or medical care of border-line cases, or medical care of the low wage group? If so, inform the Michigan State Medical Society. Give the facts so that they may be published under county society news and also be integrated throughout other counties where applicable.

* * *

The list of advertisers is getting larger. These friends of yours—without whom THE JOURNAL could not be as large and as good as it is—know that you are reading THE JOURNAL. It is reflected in the new business coming their way. Won't you please tell them that you saw and read their particular messages in THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY?

July 20, 1936, is the deadline date for county medical societies which desire to invite the Michigan State Medical Society to hold its 1937 meeting in their community. The Constitution, Article 7, Section 1, states: "Any county society desiring the Annual Meeting shall file an application with The Council sixty days prior to an annual session." The annual session this year begins September 21, 1936.

* * *

Dr. James H. Means of Boston was chosen president-elect of the American College of Physicians at the annual meeting in Detroit. Two Michigan physicians were also honored by the nominating committee. They were Dr. James D. Bruce of Ann Arbor, made a member of the Board of Regents, and Dr. Henry R. Carstens of Detroit, put on the Board of Governors.

* * *

A package of twenty-one booklets relative to state medicine, sickness insurance, and socialization of medicine is available to members of the Michigan State Medical Society and to laymen to whom they wish such literature mailed. Send names to 2020 Olds Tower, Lansing, and please indicate whether you desire your name to be mentioned in the letter accompanying the package.

* * *

Thirty-five probate judges of Michigan have written letters to the Michigan State Medical Society expressing opinions on the filter system organized by the Society to insure that state-supplied medical care be limited to those rightfully requiring it. The letters of the judges were highly complimentary and have encouraged the State Society to greater effort. With the approval of the individual probate judges, some of the various letters will be published in THE JOURNAL.

* * *

The Washtenaw County Medical Society distributes a monthly letter to members which includes the program of the month, the minutes of the last meeting, a message from either the President or the Secretary of the County Medical Society, and a blank space for notes on the meeting to be made by the member. This printed folder is organized by Dr. John V. Fopeano, Secretary, and materially aids the esprit de corps of this active medical society.

* * *

At the American College of Physicians Convocation held at the Hotel Book-Cadillac, Detroit, March 4, 181 candidates were admitted to fellowship. Of this number, the following are from Michigan: Franklin Walter Baske, Flint; Roy Herbert Holmes, Muskegon; Charles E. Lemmon, Detroit; Willard D. Mayer, Detroit; Elbert Smith Permenter, Alpena; Harold Riche Roehm, Birmingham; Harold Abraham Robinson, Detroit; Lufti Mustafa Sa'di, Detroit; and F. Janney Smith, Detroit.

* * *

The "Invitation to Exhibitors" was sent to prospective technical exhibitors on March 28, 1936.

Any physician desiring to display a scientific exhibit at the 1936 Annual Meeting of the Michigan State Medical Society should write to the Scientific Exhibits Committee, Dr. C. T. Ekelund, Chairman, 906 Riker Building, Pontiac, Michigan.

Any physician knowing of a business house which desires to display in the technical exhibit should mail a postal card to the Executive Office, 2020 Olds Tower, Lansing. This will be highly appreciated.

* * *

The Annual Clinic of the Alumni of the Wayne University College of Medicine will be held on Wednesday and Thursday, June 17 and 18. The

program is as follows: *Wednesday, June 17*—8 to 12: Lectures and Clinics at the College Auditorium; 2 to 6: Entertainment—possibly a boat ride; 7 P. M. Class Reunions. *Thursday, June 18*—8 to 12: Operative Clinics, Medical Ward walks, and Clinical Programs at the various hospitals; 2 P. M. Commencement with other Colleges of Wayne University.

* * *

A monthly communication, to members only, is sent out by one or two of the county medical societies of Michigan. This mimeographed sheet contains information which should be known to the members of the county medical society, but is of such a nature that it can not be published in the bulletin of the county medical society, which has general circulation (for example, the suspension of a physician from membership). Such monthly reports stimulate interest in the society, and might well be used by most of the fifty-three county societies of Michigan. The cost would be very small. Returns are great.

* * *

The fifteenth annual series of lectures held by the Beaumont Foundation of the Wayne County Medical Society were given at the Detroit Institute of Arts on March 23 and 24. The lecturer was Dr. Charles A. Doan, Professor of Medicine and Director of the Department of Medical and Surgical Research of the Ohio State University College of Medicine. The general subject was "Clinical Implications of Modern Physiologic and Hematology." It has been the custom for several years to publish these lectures in this JOURNAL. This custom will be followed this year so that the lectures will appear in the June and July numbers.

* * *

Judge R. T. Hudson, president of the State Bar of Michigan, appointed on March 16, five lawyers to act as a liaison committee with a similar committee from the Michigan State Medical Society. Mr. Miles Knowles of Highland Park is chairman. Other members of the committee are Mr. Herbert V. Barbour of Detroit, George D. Clapperton of Grand Rapids, Francis J. Shields of Powell, Claude W. Coates of Sault Ste. Marie. The physicians on the Michigan State Medical Society Committee are Dr. A. F. Jennings of Detroit, Dr. C. W. Brainard of Battle Creek, Dr. R. H. Denham of Grand Rapids, Dr. H. H. Cummings of Ann Arbor, and Dr. C. S. Kennedy of Detroit.

* * *

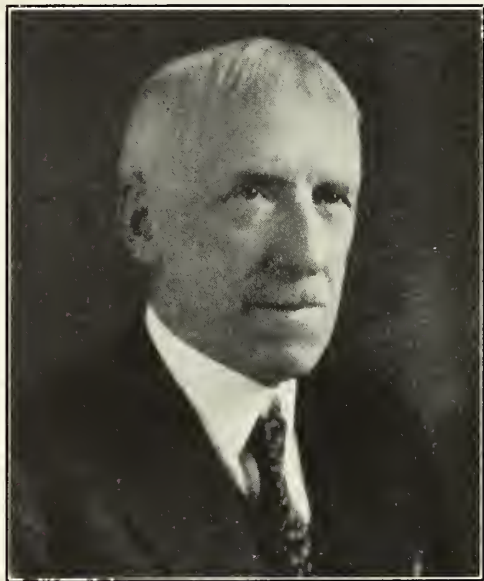
"Authorization of Physical Examinations, Treatment, Operations and Autopsies" is an excellent little booklet prepared by Dr. William C. Woodward of the American Medical Association, Bureau of Legal Medicine. It contains twenty-two pages. It discusses what constitutes lawful authority for making physical examination of a patient, or for performing an operation, or applying vaccine, splints, roentgen rays, or drugs, or performing an autopsy. Copies may be procured for ten cents by writing the American Medical Association, 535 North Dearborn Street, Chicago.

* * *

Medical Symphony Orchestra: Michigan can boast one of the most complete, if not the largest medical symphony orchestras in the United States. The Wayne County Medical Society group comprises fifty-three pieces, with every type of instrument represented. Its annual concert was given in the Detroit Institute of Arts Auditorium on March 30, 1936. In addition to the orchestra, the Wayne County Medical Society Glee Club presented a concert of choice presentations. The whole program was carried out with professional finesse, a fitting climax to a year of constant practice and effort on the part of these Detroit physicians. Congratulations!

Dr. Biddle Honored

Dr. Andrew P. Biddle of Detroit was tendered a complimentary banquet April 1st at the Hotel Book-Cadillac by the Wayne County Medical Society and the Detroit Dermatological Society. Dr. Biddle is one of the best known physicians in the state of Michigan. He has been president of the Michigan



DR. ANDREW P. BIDDLE

State Medical Society, also president of the Detroit Academy of Medicine and Fellow of the American College of Physicians. He was the first president of the Detroit Dermatological Society. In 1925, he was elected president of the American Dermatological Society. Dr. Biddle, in addition to his professional attainments, has been very active in civic affairs of Detroit and Wayne County. He was a member of the Detroit Board of Education from 1917 to 1925 and for the past six years has been a member of the Detroit Library Commission. He also served six years on the Michigan State Board of Health following an appointment by the late Governor Ferris.

Dr. Biddle, Dr. Angus McLean and Dr. Don M. Campbell in 1891 began an association which lasted for eighteen years in an office building located where the Penobscot Building now stands. Then the three located in the David Whitney Building when popularity and prestige called for greater accommodations. As the years passed, many other friends were made, two of whom, ex-Governor Fred W. Green and Dr. Leo M. Franklin, responded respectively to the toasts "Courage in the Army Medical Officer" and "Culture in the Education of a Physician." John W. Smith, representing the city, paid his respects to the honored guest.

Dr. Biddle is in the true sense a scion of a pioneer family. His grandfather came to Detroit in 1823 when he was appointed Registrar of the United States Land Office for this district. He was Detroit's mayor in 1827 and 1829. He was president of the first constitutional convention in Michigan in 1825. Dr. Biddle's father, a graduate of the Harvard Law School, raised and drilled Union troops in the Civil War. Two of Dr. Biddle's brothers went to West Point.

Dr. Biddle has not only been honored by the medical profession but also by Wayne University and the University of Michigan. He has been the recipient of the honorary degree of D.Sc. from Wayne University and M.A. from the University of Michigan.*

He graduated from the Detroit College of Medicine in 1886. After many years of service as Professor of Dermatology, he was made Emeritus Professor. He is at present consultant to Receiving Hospital, St. Mary's Hospital, Woman's Hospital, Children's Hospital, St. Joseph's Mercy Hospital, to the Protestant Children's Home and the Detroit Board of Health. Dr. Biddle was honored by the Michigan State Medical Society at its annual meeting at Sault Ste. Marie in the establishment of the Andrew P. Biddle lecture, which is to be an annual event.

* * *

"Michigan State Medical Society Night" was celebrated by the Washtenaw County Medical Society on March 10, 1936. President Grover C. Penberthy of the Michigan State Medical Society presented "A Ten Point Plan for the State Society"; Secretary C. T. Ekelund talked on "Our Changing Medical Practice"; the Chairman of the State Society's Public Relations Committee, Dr. L. Fernald Foster, spoke on "The Operation of Medical Filter Boards." A large and enthusiastic attendance greeted these officers of the State Society. A full report will be printed in the news notes from Washtenaw in the May issue of THE JOURNAL.

* * *

A total of 506,719 persons viewed the medical exhibit at the "Little World's Fair" in Detroit during the week of March 8! The Wayne County Medical Society utilized 500 square feet to demonstrate various phases of preventive and curative medicine. From the moment the exhibit hall opened each afternoon to the actual extinguishing of the lights at midnight, a long queue of people pressed to enter the WCMS booth. The Exhibits Committee of this County Society deserves great congratulation for this unusual work of education. It should inspire other county medical societies to similar endeavor. The public is begging for medical information. It is the profession's duty to provide it. It can best be done through the county medical society.

* * *

Dr. J. W. Hauxhurst of Bay City, Michigan, who has been a member of the Bay County Medical Society and the Michigan State Medical Society for fifty years, was recently recommended by The Council for Honorary Membership in the Michigan State Medical Society. Upon hearing of this proposed honor, Dr. Hauxhurst, who is eighty-eight years old, immediately demurred to the Secretary of his County Medical Society, saying that he was too young to be "retired" into Honorary Membership and that he wished to continue as an active member of his Medical Society. In notifying the State Society, the County Secretary stated that Dr. Hauxhurst has not missed a meeting of the County Medical Society in twenty-five years. When Dr. Hauxhurst was notified by the State Society that he was still very much an active member, he replied: "I am sure if I were only an honorary member of our Society I would not feel attracted to its meetings. I do derive much benefit and pleas-

*In this connection the reader is referred to the editorial "Getting Along by Degrees," volume 34, page 673, MICHIGAN STATE MEDICAL JOURNAL, in which this JOURNAL paid its compliments to Dr. Biddle.

ure from the meetings and the personal contact with the membership, and I am moved to think afterwards on subjects read and discussed which otherwise would lie dead to me. If my ability to continue on this path will permit, such is my decision, and the terminal will be reached when I am ripe for the harvest."

* * *

"Michigan State Medical Society Night" at Flint, February 19

The Genesee County Medical Society arranged a "Michigan State Medical Society Night" at the Dresden Hotel, Flint, on Wednesday, February 19, 1936. Dinner was served at 6:30, followed by a program of addresses by the guests.

Dr. R. D. Scott, president of the Genesee County Medical Society, introduced the toastmaster, Dr. F. E. Reeder, speaker of the House of Delegates of the Michigan State Medical Society. He presented Dr. L. Fernald Foster of Bay City, chairman of the Public Relations Committee of the State Society, who defined "integration." Dr. C. T. Ekelund, Pontiac, Secretary of the State Society, spoke on "What Price Socialism." Dr. Grover C. Penberthy, Detroit, president of the State Society, gave "The State Society's Five Year Program." Dr. Henry Cook, Flint, chairman of The Council, spoke on "The 'Busyness' of the Michigan State Medical Society." Mr. Wm. J. Burns, Executive Secretary of the State Society, discussed "What Can a County Society Do to Solve Its Own Problems?"

Judge Frank L. McAvinchey, Probate Judge of Genesee County, presented "The Opportunities in Medical Practice," which was received with such enthusiasm that the speaker was elected an Honorary Member of the Genesee County Medical Society.

Among the 126 present at this memorable affair were: Drs. H. M. Best of Lapeer, D. J. O'Brien of Lapeer, D. Tarter and W. G. Gamble of Bay City, W. E. Ward and I. W. Greene of Owosso, H. Graham of Mt. Morris, L. A. Farnham of Pontiac, B. R. Sleeman of Linden, Roy Herbert Holmes of Muskegon, James Houston of Swartz Creek, F. L. Covert of Gaines; E. P. Trobert, Attorney; O. B. Pike, Credit Manager; M. S. Van Geison, M. C. Beesher, B. A. Schuff, S. S. Gorne, D. F. Peaver, Geo. E. Anthony, Allen E. Brunson, F. E. Ludwig, Gayle Spann, V. E. Linden, J. Finkelstein; C. Manikern of Ashtabula, Ohio, and R. B. Daig of Flint; Drs. C. P. Clark, R. G. Pett, C. W. Colwell, S. I. Foley, R. S. Morrish, G. R. Backus, D. R. Wright, J. C. Benson, G. C. Matthewson, R. G. Brain, James A. Olson, O. C. Pratz, F. H. Steinman, W. H. Winchester, J. W. Handy, Herman G. Rosenblum, L. A. Lambert, C. E. Walden, L. Shantz, C. K. Stroup, M. S. Chambers, L. L. Willoughby, R. M. Bradley, G. L. Willoughby, W. B. Hubbard, W. H. Marshall, A. S. Weelock, F. B. Miner, A. H. Kretchmar, R. W. MacGregor, Geo. D. Sutton, G. H. Bahlman, S. Conover, D. M. MacGregor, S. T. Flynn, J. A. Spencer, Otto Preston, Max Burnell, B. E. Burnell, D. L. Treat, E. A. Irvine, Harold Woughter, R. A. Stephenson, F. W. Baske, G. V. Conover, H. H. Hiscock, A. Thompson, W. W. Stephenson, Joseph A. Macksood, Robert Gregg, V. Richeson, D. C. Smith, E. Rumer, H. Jefferson, S. S. Sorkin, H. M. Golden, D. R. Wark, J. W. Evers, D. C. Adams, H. F. Grover, F. A. Roberts, F. W. Bald, C. J. Scavarda, C. C. Probert, H. Marsh, T. N. Wills, A. T. Bonathan, C. H. O'Neil, James A. Rowley, Herbert White, I. D. Odle, B. W. Malfroid, R. W. Streat, A. J. Reynolds, Geo. R. Goering, V. H. Morrissey, A. C. Blakeley, E. D. Rice, and Bernard F. Corbett, all of Flint.

Dr. Barstow, Councillor of the Eighth District

Dr. W. E. Barstow of St. Louis, Michigan, was appointed by President Grover Penberthy as councillor of the eighth district to fill out the unexpired term of Dr. Julius Powers of Saginaw, who has resigned after a number of years as a member of the council of the Michigan State Medical Society



DR. W. E. BARSTOW

and as president of the council and executive committee.

Dr. Barstow was born in Gratiot County, Michigan, in 1877. He received his early education in Ithaca High School and later attended and graduated from the University of Michigan Medical School in 1905. During his senior year at the University, he was on the student staff of Dr. Walter Parker. Since his graduation 31 years ago, he has practiced his profession in St. Louis, Michigan. He was associated with Dr. Brainard as first assistant surgeon in Brainard's Hospital from 1910 to 1920. He has been a member of the Michigan State Medical Society for thirty years, secretary of the county society for two years and president of the county society for two terms. He is a member of the staff of St. Mary's Hospital, Saginaw, and vice president of the staff of the R. B. Smith Memorial Hospital at Alma. Dr. Barstow takes the position of councillor of the Michigan State Medical Society after a prolonged and active experience in the county medical society. Both state society and Dr. Barstow are to be congratulated on the appointment which will mean to Dr. Barstow a wider field of service and to the Michigan State Medical Society an active and aggressive worker in succession to Dr. Powers, who has also given of his time and ability unstintingly in the interests of the profession.

* * *

The filter system of the Michigan State Medical Society is still making many friends for physicians in various counties. Probate judges and poor commissioners are writing glowing accounts of the splendid coöperative work of their physicians in the county medical societies, and how the filter program is cutting cases to those needing medical service, and saving money for the state and counties.

Judge Clair R. Black of Saint Clair County, Port Huron, writes a typical letter of satisfaction and congratulation for the medical profession's work in this emergency:

Dr. L. Fernald Foster,
Michigan State Medical Society,
2020 Olds Tower,
Lansing, Michigan.

Dear Doctor:

I have your letter of March 12 in reference to the filter system and answer your questions as follows:

- (1) The medical profession in this county is coöperating fully.
- (2) The hospitals are coöperating fully.
- (3) The problems that have arisen in this county have been taken care of by the members of the local medical profession.
- (4) Both the medical and financial filter system are working out in splendid shape.

The filter system is doing wonders in this country! Although we can not tell at this time the actual amount of money saved as a county during the last three months, and will not know until April, I know we are making a great saving. Many people who would have asked the county for medical aid are now going back to their family doctor. Up to the present time we are quite satisfied with the filter system.

Very truly yours,

(Signed) CLAIR R. BLACK,
Judge of Probate.

March 18, 1936.

* * *

New Medical Dean

The Medical Department of Wayne University, Detroit, is to have a new, full time dean in the person of Dr. Raymond B. Allen, associate dean of Columbia University Medical School. The appointment was made by the Detroit Board of Education on March 11. Dr. Allen's salary will be \$8,500. The appointment takes place May 18th. Former dean, Dr. William H. McCracken, resigned in June, 1935, owing to ill health. Dr. William J. Stapleton Jr. of Detroit was appointed acting dean until a successor to Dr. McCracken might be appointed. Dr. Stapleton has given entire satisfaction to the college as well as to the Board of Education. He will hold the position of associate dean.

Dr. Allen graduated from the University of Minnesota Medical School in 1928. After a short time in practice at Minot, North Dakota, he entered the Mayo Clinic at Rochester on a fellowship and was awarded a Ph.D. in urology in 1934. He went to Columbia the same year, where he was made associate dean in charge of graduate studies. He was also associate director of the New York Post Graduate Medical School and hospital of the Columbia University.

* * *

American Medical Golfers Play in Kansas City, Monday, May 11

The American Medical Golfing Association will hold its twenty-second annual tournament at the Mission Hills Country Club and the Kansas City Country Club in Kansas City on Monday, May 11, 1936.

To accommodate comfortably the large entry which is anticipated, the Kansas City Committee has arranged play over two very fine courses which touch corners; the Mission Hills Country Club and the Kansas City Country Club. Their club houses are only one mile apart and ample transportation between the two has been arranged. Dinner for all players will be served in the Mission Hills Club House.

Seventy Trophies and Prizes

Thirty-six holes of golf will be played in competition for the seventy trophies and prizes in the nine events. Trophies will be awarded for the Association Championship, thirty-six holes gross, The Will Walter Trophy; the Association Handicap

Championship, thirty-six holes net, The Detroit Trophy; the Championship Flight, First Gross, thirty-six holes, The St. Louis Trophy; the Championship Flight, First Net, thirty-six holes, The President's Trophy; the Eighteen Hole Championship, The Golden State Trophy; the Eighteen Hole Handicap Championship, The Ben Thomas Trophy; the Maturity Event, limited to Fellows over 60 years of age, The Minneapolis Trophy; the Oldguard Championship, limited to competition of past presidents, The Wendell Phillips Trophy; and the Kickers Handicap, The Wisconsin Trophy. Other events and prizes will be announced at the first tee.

1,150 A. M. G. A. Members in Every State of the Union

Dr. M. M. Cullom of Nashville, Tennessee, is president and Dr. W. Albert Cook of Tulsa, Oklahoma, and Dr. Walt P. Conaway of Atlantic City are vice presidents of the American Medical Golfing Association, which was organized in 1915 by Dr. Will Walter, Dr. Wendell Phillips and Dr. Gene Lewis, and now totals 1,150 members, representing every state in the union. The living past presidents include Dr. Thomas Hubbard of Toledo, Dr. Fred Bailey of St. Louis, Dr. Edward Martin of Media, Pennsylvania, Dr. Robert Moss of LaGrange, Texas, Dr. Charlton Wallace of New York, Dr. Will Walter of Chicago and Charlottesville, Virginia, Dr. James Eaves of Oakland, California, Dr. Chester Brown of Danbury, Connecticut, Dr. Samuel Childs of Denver, Dr. W. D. Shelden of Rochester, Minnesota, Dr. Walter Schaller of San Francisco, Dr. Edwin Zabriskie of New York, Dr. Frank A. Kelly of Detroit, Dr. John Welsh Croskey of Philadelphia, Dr. Homer K. Nicoll of Chicago, and Dr. Charles Lukens of Toledo.

Kansas City Golf Committee

The Kansas City Committee is under the general chairmanship of Dr. Clarence Capell, Rialto Building, Kansas City, Missouri. He will be assisted by Drs. A. W. McAlester, Jr., Logan Clendenning, and A. C. Griffith, on Entertainment; Drs. A. E. Jones, E. R. DeWeese, C. A. McGuire, D. A. Williams, Cliff Mullen, Lewis Allen, and Harold Roberts, on Prizes; Dr. A. S. Welch on Publicity; Drs. T. A. Kyner, J. S. Snyder, Clarence Sanders, on Transportation; Drs. C. D. Cantrell and J. Q. Chambers, on Scoring; Drs. Chas. C. Dennis and Kip Robinson, on Starting.

Application for Membership

All male Fellows of the American Medical Association are eligible and cordially invited to become members of the A. M. G. A. Write the Executive Secretary, Bill Burns, 722 W. Lenawee Street, Lansing, Michigan, for an application blank. Participants in the A. M. G. A. Tournament are required to furnish their home club handicap, signed by the secretary. No handicap over 30 is allowed, except in the Kickers' (Blind Bogey). Only active members of the A. M. G. A. may compete for prizes. No trophy is awarded a Fellow who is absent from the annual dinner.

The twenty-second tournament of the American Medical Golfing Association promises to be a happy affair. The officers anticipate that some two hundred medical golfers from all parts of the United States will play in Kansas City on May 11.



Physicians and Probate Judges Meet in Bay City

The Bay County Medical Society and its Public Relations Committee successfully conducted a meeting with governmental officials at the Wenonah Hotel, Bay City, on Friday, February 28, 1936.

The County Medical Society invited some seventeen probate judges and a number of county poor commissioners and others connected with some phase of the filter system developed by the Michigan State Medical Society in connection with medical care of afflicted and crippled children under Michigan Acts No. 236 and 274. Among those who attended this joint meeting were Judges Date J. LaGoe of Midland County, H. Walter Cooper of Tuscola County, Charles E. Moore of Crawford County, Frank L. McAvinchey of Genesee County, Geo. A. Cuyler of Alcona County, Roy J. Crandell of Arenac County, D. J. Kavanagh of Bay County; Commissioners E. S. Sias of Midland County, John R. Cotter of Bay County, P. B. Johnson of Bay County, and Geo. J. Laetz of Bay County; Dr. A. R. Miller, Mayor of Harrisville, Alcona County, Mr. O. K. Schuman of Crawford County; Doctors Henry Cook of Genesee County, G. L. McKillop of Otsego County; Mr. Wm. J. Burns, Executive Secretary of the Michigan State Medical Society, and Dr. C. R. Keyport of Crawford County.

Dr. Cook and Judge McAvinchey Speak

Dr. M. C. Miller, Auburn, President of the Bay County Medical Society, turned the meeting over to Dr. R. C. Perkins, Chairman of the local Public Relations Committee, who explained that this conference was for the purpose of ironing out any difficulties or misunderstandings in connection with the filter system and for the discussion of possible weak spots in the program. Dr. Perkins called upon Dr. Henry Cook of Flint, Chairman of The Council of the Michigan State Medical Society, who outlined the movement from its inception on October 30, 1935; upon William J. Burns, Executive Secretary of the Michigan State Medical Society, who reported on the progress to date of the filter system; and upon Judge Frank L. McAvinchey of Genesee County, who stated at the outset that this program had resulted in two important accomplishments: recognition by State officials of the Probate Judges Association and of the Michigan State Medical Society. He reported on the excellent results in various counties where the filter has been working, and stated that *the filter system will have saved the State of Michigan approximately \$600,000 this year as the number of commitments have been reduced materially and the expenses about 50%.* Judge McAvinchey read letters from the various probate judges of Michigan, giving their frank comments on the program. He urged the county medical societies to keep close contact with their probate judges, and in turn asked the probate judges to wait on the physicians of their various districts. *He suggested that filter committees make reports to the probate judge after each meeting of the committee, giving a short report, a diagnosis in plain English, and recommendations on each case.* He appealed to both groups for cooperation and perfect understanding, to make the whole program more efficient and economical, or otherwise an effort might be made by certain politicians to change the laws and throw the expense from the State on to the poverty-stricken counties.

Judges LaGoe, Cooper, Kavanagh, Moore, Crandell, and Cuyler were called upon and gave their viewpoint relative to the filter system. Others who spoke were O. K. Schuman, publisher of Grayling, Mr. E. S. Sias, Mr. Geo. J. Laetz, Drs. C. R. Keyport and P. R. Urmston and L. Fernald Foster.

Joint Work of Judges and Physicians Required

Dr. Cook closed the meeting by stating that if and when the Schedules A, B, C, and D are reinstated as of April 1, 1936, according to the resolution of the Crippled Children Commission, the cooperation of the judges and the medical profession will be necessary to keep the load down. Success depends upon the tightness of the system with all cases being filtered. He recommended that the next integration program of the Public Relations Committee should be a post payment system adopted by the individual practitioner to help the people to be self-sustaining.



DR. JULIUS POWERS of Saginaw

Dr. Powers has resigned as councillor of the eighth councillor district after a number of years of valuable service to the Society. He was chairman of the Council during 1934-1935.

A Significant Appointment

There has been a noteworthy tendency of recent years for not only industrial but for pharmaceutical firms as well to engage in research in the departments of manufacture in which they are engaged. This tendency it is needless to say is commendable inasmuch as the consumer of the product is the beneficiary. The appointment of Dr. Albert L. Raymond as director of the research laboratory of G. D. Searle and Company of Chicago is announced. Dr. Raymond has been connected with the Rockefeller Institute of Medical Research for the past nine years. For two years he was a National Research Fellow working on the problems connected with the biological mechanism of carbohydrate degradation. Dr. Raymond holds the degree of Ph.D. from the California Institute of Technology. He is a member of the American Chemical Society and the American Society of Biological Chemists.

In an interview Dr. Raymond says: "I know of no field offering greater facilities for the practical application of biochemical research than the laboratory of a pharmaceutical house. Here we come in first hand contact with the problems of that working scientist, the practicing physician, and this is a great incentive to provide him with better chemical instruments with which to fight disease."

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column and this will be deemed by us a full compensation to those sending them. A selection will be made for review, as expedient.

THE 1935 YEAR BOOK OF NEUROLOGY, PSYCHIATRY AND ENDOCRINOLOGY. Neurology edited by Hans H. Reese, M.D., Professor of Neurology and Psychiatry, University of Wisconsin Medical School. Psychiatry edited by Harry A. Paskind, M.D., Assistant Professor of Nervous and Mental Diseases, Northwestern University Medical School; Attending Neurologist, Evanston Hospital; Associate Attending Neurologist, Michael Reese Hospital. Endocrinology edited by Elmer L. Sevringhaus, M.D., Associate Professor of Medicine, University of Wisconsin Medical School. The Year Book Publishers, Inc., 304 South Dearborn Street, Chicago. \$3.00.

The authors have included endocrinology along with neurology and psychiatry in the 1935 Year Book. We have had occasion to review several of these Year Books on different subjects and have said that the standing of the various editors is a guarantee of the quality of the work. The same, it goes without saying, is true of the present volume. The reader will find a careful review of all important results of recent teaching of the various subjects. This work of over 750 pages embodies the latest research and teaching of the subjects under consideration. A comprehensive index renders the work extremely satisfactory as a book of reference.

A TEXTBOOK OF ROENTGENOLOGY, THE ROENTGEN RAY IN DIAGNOSIS AND TREATMENT. By Bede J. Michael Harrison, M.B., Ch.M., C.M.R.E. (Cantab.) F.A.C.R., Director of the Department of Roentgenology, Vancouver General Hospital, Roentgenologist to Vancouver Public Health Institute for Disease of the Chest. Pages, 826. Illustrated. Price \$10.00. Baltimore: William Wood and Company, 1936.

During the four decades since the discovery of the x-rays, there have been numerous books on various phases of diagnostic Roentgenology and Roentgen Therapy, many of them excellent. They have been for the most part books for the specialist. While the present work will be found of interest to the specialist, it is one for the internist, the surgeon and the general practitioner as well, inasmuch as it correlates the x-ray findings with pathology. It emphasizes the roentgenologist's position in the medical profession as a consultant. The specialist in roentgenology will find the work of particular value since it supplies a knowledge of gross pathology which is an essential part of his professional equipment. On the other hand, the internist, the surgeon and the general practitioner, by studying its pages, will be in a position to obtain the greatest help from the roentgenologist. Harrison's textbook contains chapters on x-ray physics, radiophysiology and biology, the purpose of which is to enable the reader to brush up on these essentials to an understanding of the subject of roentgenology and radiotherapy; the following chapters deal with regions of the body, their anatomy, physiology and pathology, particularly gross pathology, and then is given in detail the correlation of the roentgen findings with the under-

lying pathology. In this respect, the work is unique. It should be made clear that no attempt is made to provide anatomy, physiology and pathology in one volume. Only the anatomy, physiology and pathology of those parts that are altered in a gross way by disease are presented, inasmuch as roentgenology is concerned with changes that are visible to the eye. Hence such a work is possible without being voluminous. The book is admirably indexed and provided with an analytical table of contents. The author and the publisher are to be commended on producing a work for which there is a crying need. The jargon of the roentgenologist is interpreted in plain comprehensible terms to those who consult with him.

RECENT ADVANCES IN CARDIOLOGY. By Terence East, M.A., D.M., F.R.C.P., Physician, Kings College Hospital and Woolwich Memorial Hospital, and Curtis Bain, M.C., D.M., M.R.C.P., Physician, Harrogate General Hospital. Third Edition, with 14 plates and 85 text figures. Philadelphia: P. Blakiston's Son & Co., Inc., 1012 Walnut Street, 1936.

This is one of the "Recent Advances Series" of which there are about two dozen, which cover the recent advances in the various fields of medicine. The authors have, apparently, reviewed the recent literature covering cardiac diseases and, in this work, have, in their own language, discussed the subject-matter found in the late literature. Much of their discussion, however, covers knowledge that can not be regarded as recent. The book amounts to a concise discussion of cardiac and related diseases in the light of knowledge found in recent literature.

The many fine reproductions of electrocardiographs and of radiographs serve well to illustrate the points in their discussion. Throughout the book, as one would expect, there is a profuse bibliography.

CLASSIFIED ADVERTISEMENTS

MORPHINE AND OTHER DRUG ADDICTIONS—Institutional care and treatment of selected patients who have responsibilities, wish to make good and learn how to keep well; methods easy, regular, humane. Twenty-eight years' experience. Dr. Weirick's Sanitarium, Elgin, Ill.

CHARTERS' MATERNITY HOSPITAL

A private hospital and home for young women desiring seclusion. Patients accepted any time during gestation. Physicians are requested to furnish a prenatal certificate. Rate reasonable. FLUSHINGMICHIGAN

ASSISTANCE TO MEDICAL WRITERS—Research, Abstracts, Translations. Papers prepared. Personal work, not a Bureau. Twelve years' medical literary experience with leading medical societies and journals. Florence Annan Carpenter, 413 St. James Pl., Chicago, Ill.

THE JOURNAL

OF THE

Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. 35

MAY, 1936

No. 5

SURGERY OF CHILDHOOD*

GROVER C. PENBERTHY, M.D.†
DETROIT, MICHIGAN

The surgery of childhood, or surgical pediatrics as it is often referred to, was slower than medical pediatrics in its development as a special department of study and practice. From a review of the literature it is very apparent, and numerous writers, from the ancients down, have alluded to the behavior of diseases in children, the surgical occasionally, as well as the medical, and yet as late as 1846, when Coley wrote an introduction to his Practical Treatise on the Diseases of Children, he made the following statement: "I am not aware, however, that any author, British or foreign, has published a work comprehending all the diseases incident to children and their appropriate surgical as well as medical treatment." Kelley¹² states that "Dr. Coley's statement was well founded, for on perusal of many of the authors he mentions, and others not in his list, it becomes evident that none of them had given adequate attention to the surgical side of children's diseases."

Infantile surgery has been especially developed in France, where it is officially introduced as a part of the medical curriculum, together with orthopedics. Only Belgium and Latin America have adopted the French System. In Switzerland, Holland and Denmark it is not taught, nor is orthopedics, except as part of the surgery courses, unless introduced in the late years. In Austria, Germany, England, Sweden and Italy orthopedics is taught, but infantile surgery is a part of general surgery. Portugal and Spain teach surgical and medical pediatrics in the same course.¹⁷ In many of our medical schools some instruction is given in infantile and childhood surgery along with instruction in pediatrics.

Relation to Pediatrics

The surgery in childhood has the most intimate relation to pediatrics and it may be said that the pediatricians have helped stimulate and develop the interest of the surgeons in this field. In childhood from the first month, particularly because of congenital deformities and anomalies, if operation appears necessary, it is important to decide whether it shall be done and when it shall occur. Experience shows that there is no definite rule that can be followed. On the one side there are children who are very young, perhaps only recently born, who are sent in for serious operations which would be best not done since there is no compelling reason for surgical interference. Often a better result could be obtained later and this would apply to those conditions where cosmetic results are desired. On the other hand, we often see that a child is only brought after valuable time has elapsed, making the operation, which would have been easy earlier, impossible, ineffective or of little value. Unfortunately the present depression and economic strain has influenced the number falling in this latter group. Experience and the counsel of the pediatrician help to

*From the Surgical Service of the Children's Hospital of Michigan.

†Dr. Penberthy was graduated from the University of Michigan in 1910. He specializes in surgery. He is president of the Michigan State Medical Society, 1935-36.

decide some of these important problems.⁷ The appreciation of the surgeons is therefore expressed because of the valuable assistance rendered by the pediatricians both before and after operation.

The reports of the White House Conference on Child Health and Protection⁸ show the child a definite clinical entity, and the surgical problems are as definitely dependent upon the peculiar reactions and conditions of that period, as are the medical. John Lovett Morse repeatedly emphasized this point in his classes by the statement that "a child is not a little man," and Barrington-Ward touches upon it when he says in reference to abdominal surgery in children, "The adult may be safely treated as a child but the converse may lead to disaster."

The surgery as applied to the child differs little from that of the adult, as far as principles are concerned, but, nevertheless, the small structures in the young and their delicacy call for recognition and handling, a special study. As Coe has said so well in a recent publication, "The great surgical advances of the past have been made in entering supposedly inaccessible or forbidden regions of the body, in the excision of organs, and in the development and refinement of technic. Recently, however, there has been a distinct trend toward physiologic surgery as typified by the broadening interest in surgery of the sympathetic nervous system, reconstructive surgery, Coffey's work upon ureteral implantation, and the like. At no period of life are physiologic processes more active than during infancy and childhood; at no period is the rate of development more rapid, and surgery of this period is, in the highest degree, physiologic and developmental surgery." The work of the late Doctor Ballin in removing the parathyroid, where there has been a definite upset in the calcium metabolism, with improvement after operation, falls in this same category.

Importance of Fluid Balance

The need of a fluid balance for proper functioning of the human body is all-important. At no period of life is this so important as during the rapid growth of infancy and childhood.¹⁴ The loss of a pound of fluid a day is evidence that a condition of dehydration incompatible

with life may soon develop. Maintaining the heat and fluid reserve is fundamental in the treatment of both medical and surgical conditions.

The absorption of fluid is a normal physiologic function of the colon, but this amount of absorption of various solutions has been open to question.^{6,16} It has been shown that the entire amount of glucose given may be recovered in bowel washings with only the water being absorbed. The ileum absorbs carbohydrate, and in case of deficient blood sugar the colon absorbs carbohydrate as readily as the ileum.

The intravenous method of giving solutions is generally accepted as the most efficient, and continuous intravenous injections of saline may be a life saving measure in cases of extreme dehydration or loss of chlorides from vomiting. In combating post-operative distention, saline and glucose given intravenously are of great value, but to avoid unpleasant reactions it may be safer to give them separately. Saline given by hypodermoclysis is much the simplest method and although the absorption may be slow, depending upon the child, it is an efficient way for replacing lost fluids and helping to maintain a proper fluid balance.

Factors Influencing Prognosis

Some of the factors having an influence on the prognosis of the child classified for operation are as follows: the age; type of disease; the condition of the child, especially if the illness has existed for some time and there is present evidence of dehydration, in which case saline and glucose should be given intravenously or subcutaneously or a blood transfusion preliminary to surgical intervention; the anesthetic; the danger attended by operations of long duration; rough handling of viscera; and lastly the loss of blood, which is not withstood by the child, especially the infant.

Anesthetic

The anesthetic of choice will depend upon the lesion and age of the child. Local anesthesia may be used on the very young or the children old enough to understand and coöperate. For the general run of cases the inhalation method has much in its favor. Unfortunately in small children the borders between the stage of tolerance and that of intoxication lie close together, requiring,

therefore, a skilled anesthetist. A factor of great importance in childhood is psychic trauma, particularly in successive operations in the course of a disease. Nitrous oxide and oxygen, administered by the skilled anesthetist, causes quick induction and eliminates the struggling observed with ether, although to obtain relaxation it may be necessary to follow the nitrous oxide with ether. In the literature the past three or four years there have appeared many articles on local anesthesia reporting the intravenous use of the barbiturates, and, more recently, rectal use of tribromethyl alcohol under the trade name of Avertin, but this has not been tried at the Children's Hospital. Spinal anesthesia merits favorable consideration, especially in cases requiring splenectomy or for intestinal obstruction.

Malformation, Reconstruction Surgery

Malformations of the bone, joints, of the cranium, the spine and neck, the urogenital and other malformations are treated today according to the most recent therapeutic ideas and according to the ideas on the pathogenesis. The orthopedic surgeons have made great progress in dealing with the congenital deformities and those caused by infantile paralysis. The same may be said of the management of the various forms of infantile surgical tuberculosis.

Appendicitis

The abdomen in children calls for the same early intervention as practiced in adults. The subject of appendicitis has been discussed about as often as any surgical condition, but with all this interest, too often the lesion is not recognized early enough to give the child the chance it deserves. Many factors may be responsible—sympathy for the child, objection on the part of the parents thinking the lesion applying more to the adult, or the physician waiting for localized pain and tenderness in the right lower quadrant to convince the parents and himself that the appendix is the offending organ. Diffuse colicky pain or epigastric pain, nausea, with or without fever, an increased leukocyte count and high polymorphonuclear count should arouse immediate suspicion of appendicitis. In a recent publication it was noted that some 1,700 articles had appeared in the last three or four years and a surprising number dealt with appendicitis in

children. The mortality figures show that it is unnecessarily high in children. Graham⁹ states that for children there has been 8 per cent increase for the entire United States in the past five years, with this figure rising above 50 per cent in the statistics of the individual states. The diagnosis having been made, there is only one treatment and that is surgical interference. Early operation should mean a good prognosis. Because of the anatomical structure of the appendix in children, perforation may occur within twenty-four hours or less in the child under eleven years, and this fact makes early diagnosis and operation imperative. Seeing the patient sick 48 hours or more may call for a delay in operating, to allow localization and walling off to take place. There are enthusiastic advocates, and opponents as well, for this form of treatment. To support the argument for deferred surgery, some statistics from the Surgical Service of the Children's Hospital may be mentioned. For the year 1930, 51 per cent of the cases admitted were ruptured or abscessed, with a mortality of 4.3 per cent for all types; 1931, 67.7 per cent were ruptured or abscessed, with a mortality of 3.2 per cent, and for 1932, 63 per cent were ruptured or abscessed, with a mortality of 8 per cent for all types.* The gradual increase in the number admitted and classified as ruptured or abscessed over this five-year period would show that the cases were admitted late in the course of the disease process. To quote Coe again, "No fixed rules can be laid down for the reduction of the mortality of appendicitis in children. The factors are as diverse and intangible as economic stress, medical curricula, the personal equation of patient, parent and doctor, professional ethics, operative facilities, types of infection, body resistance, technic, pre-operative and postoperative care; but greatest and all-inclusive is the factor of surgical judgment."

Intussusception

Intussusception¹⁰ is another acute abdominal condition requiring early diagnosis and surgical interference. It is most often seen

*For 1933, of the total, 163 cases, 36 per cent were ruptured, with the mortality for the ruptured cases 13.5 per cent and the mortality for all groups 5.5 per cent. For 1934, 180 cases, 40 per cent were ruptured, with a mortality of 16.4 per cent for that group, and mortality for all classes 7.2 per cent. In a five-year study (1930 to 1934, inclusive), there were 600 cases of appendicitis with an average of 47 per cent ruptured, with the mortality for the entire 600 cases at 6 per cent.

in children apparently healthy, well nourished and occurring most frequently between the third and ninth month. In a series of forty-five cases treated at the Children's Hospital it was noted that the greatest number occurred during the winter and summer months. The first attack of pain is often manifested by the child suddenly crying out and drawing up its legs—there may be evidence of temporary collapse or convulsions. This attack is followed by subsequent attacks of pain which may not be as severe and may last but a short period. Many infants are reported to fall asleep between attacks and this factor often accounts for the physician not being called earlier. It is very possible that many cases of intussusception reduce spontaneously. The diagnosis is not particularly difficult, for with the history of recurring attacks of abdominal pain and presenting somewhat the appendicitis syndrome, no bowel movement, no fever, evidence of shock, a soft abdomen, blood and mucus on the diaper, one should be able to classify the lesion. Rectal examination will show evidence of blood and mucus on the finger cot and in the late stages vomiting is observed and a movable tumor mass may easily be palpated in the abdomen or the head of the mass felt in the rectum. Surgical intervention is recommended as being superior to the mechanical methods of reduction, which may be beneficial early, but the results uncertain. Reduction under twenty-four hours offers a good prognosis, as shown by the fact that fifteen of the twenty-three in this series of forty-five who recovered were operated under twenty-four hours, but beyond this time period the mortality figures run as high as 50 to 75 per cent.

Hernia

The subject of hernia requires little comment. Opinions may differ, however, as regards the proper time for surgery. There are two very good reasons for not operating under two years of age, except in rare instances. First, it is important that the operation be performed in an aseptic manner and the wound kept clean until healing is complete. This is extremely difficult in little children. The second argument against early operation is the fact that the tissues are delicate and the anatomical structures small.

In the repair the simplest method consistent with sound surgical procedures is a

step toward good surgery and the Ferguson operation, in not transplanting the cord, in our experience, has been found most satisfactory. It would be interesting to get follow-up information on the group of children operated by this method and learn how many have recurred.

The proper age at which to operate for undescended testis is another question where opinions may differ. Here again it is difficult to operate the very young for the reasons mentioned above, so children requiring this operation are usually not admitted for operation under six years, unless symptoms are present from the undescended testicle or an accompanying hernia.

Pyloric Stenosis

Pyloric stenosis is usually found in infants who have had a normal delivery and who appeared healthy at birth. Hirschsprung in 1888 first accurately described the condition and emphasized its clinical importance. Since that time pyloric stenosis has been studied quite extensively, both from the standpoint of the medical management and the surgical treatment. Hill¹¹ is of the opinion that five out of every thousand babies suffer from this malady. The statistics of the Children's Hospital would hardly support these figures.

From a review of the literature it appears that there has been a marked increase in the frequency of this condition in the late years. No doubt early consultation with the pediatrician has had a great influence on the early and accurate diagnosis.

Pyloric stenosis is an important and serious gastric condition of early infancy and many theories have been advanced as to the cause. There is clinical evidence to support the theory that it is of congenital origin. Strauss¹⁸ thinks that the tumor begins during fetal development of the stomach and is brought about by the rhythmic contractions of the pylorus, which doubtless start at that time. The condition is due to an abnormal stimulation from the intrinsic or extrinsic nerves of the stomach and this is exaggerated or accentuated by the taking of food after birth. The theory advanced by Hass is that it is an advanced degree of pylorospasm and that the condition is a disturbance in balance of the autonomic nervous system.

The pylorus in the normal infant is soft

and when palpated between the thumb and index finger it is difficult to tell where the stomach ends and the duodenum begins, as the point of separation is so small. The pyloric valve is formed by a reduplication of the mucous membrane of the stomach, containing numerous circular muscle fibres, which are aggregated into a thick circular ring or the pyloric sphincter. The tumor mass varies in size and shape from that of a small walnut to that of a pecan nut. It may be quite round or elongated and slightly curved. It is pale and of cartilaginous consistency. The stomach is usually dilated and ballooned and in palpating the wall it feels thickened. Faber in an exhaustive study of this subject reiterates that congenital stenosis, if not relieved in time, inevitably leads to enlargement of the stomach, the effects of which may be felt all through life. In our experience the lesion is found more often in the male child. In our series two sets of twins have been operated upon for this condition. The average age at the onset of symptoms is from two to three weeks. It has also been our observation that it may occur in relatives of the same family.

As regards the symptomatology, projectile vomiting either immediately after the feeding or later is observed in all cases. Not infrequently it is observed that the amount vomited is far in excess of that taken at the last feeding. Constipation and scanty stools are observed in the great majority of cases. The loss of weight naturally results from the inability of the child to retain its feedings.

Where the diagnosis has been made late, there is evidence of dehydration and marasmus. In about 50 per cent of the cases, the tumor mass can be palpated and the peristaltic wave which passes across the abdomen from left to right is a very significant finding. It is observed either after the taking of food or after tapping the abdominal wall over the stomach.

X-ray examination after giving the child a small amount of barium is helpful but not necessary where the symptoms described are observed. It is the opinion of many clinicians that retention of half of the barium mixture four to six hours after the taking of barium indicates the need for surgery.

The dilated stomach reaching to the umbilicus is another important clinical finding.

In differentiating this lesion from pylorospasm it is observed that the child may regurgitate with a spasm and is found to have stools, whereas in the case of stenosis there is projectile vomiting and constipated or scanty stools. There is no question but that surgical interference is indicated if there is evidence of obstruction, especially after good medical treatment fails to offer relief of symptoms. The condition may be treated medically by the use of atropine or belladonna, thick cereal feedings and gastric lavage, but the time required for good results far exceeds that of surgery, economically, therefore one should consider the Rammstedt operation the surgical procedure of choice. A linear incision is made over the tumor mass in the avascular area, using a hemostat to separate the thickened wall, allowing the submucosa to bulge into the wound, thereby enlarging the outlet of the stomach. It is our practice to operate on these cases under local anesthesia using 0.5 per cent novocaine. Ether may be required in the closing of some wounds.

These patients require careful pre-operative as well as postoperative treatment and restoring the water balance. It is also necessary to consider blood transfusion. All postoperative cases are given saline and glucose every day until in the judgment of the pediatrician it is thought unnecessary.

Four to six hours after operation the infant is put on a simple feeding, consisting of equal parts of mother's milk and water, beginning with one dram of each, increasing the amount 1 dram of each every three to four hours until the child is receiving in all one ounce every three or four hours. Between feedings two or three drams of Karo water may be given, and the feedings increased to two ounces at the end of forty-eight hours, if there is no vomiting.

There is no field of surgical endeavor which requires more close coöperation between the pediatrician, the nursing staff and surgeon as does the surgery of infancy. As stated by Helmholtz in an editorial, "The close coöperation of the surgeon and pediatrician has already accomplished much in reducing the danger of surgery but there is still much to be done."

Empyema

The present day management of empyema with improved technic has materially lowered the mortality. The treatment is conservative but effective and follows the principles recommended by the Empyema Commission^s appointed by the Surgeon General of the Army in 1917, which emphasized:

1. Careful avoidance of open pneumothorax in the acute stage.
2. The prevention of a chronic empyema by the rapid sterilization and obliteration of the infected cavity.
3. Careful attention to the nutrition of the patient.

To prevent or minimize the danger of a pneumothorax developing during the period in which the child is acutely ill with pneumonia, aspiration is practiced and this followed by a method of closed drainage, when the pus becomes creamy. This means of drainage by a catheter inserted in the interspace below the inferior angle of the scapula under local anesthesia provides dependent drainage and helps to maintain the negative pressure in the pleural cavity. It allows of free drainage and irrigation with whatever solutions the surgeon may prefer. It is our practice to use a neutral 0.5 per cent solution of sodium hypochlorite (Dakin's Solution) every four hours and at each irrigation allowing some of the solution to remain. At the end of two or three weeks the catheter may be cut and used as an open drain, when adhesions have formed to prevent lung collapse. A larger tube may be substituted at this period to improve the drainage. With this type of surgical drainage rib resection is seldom necessary and the suppurative process is controlled so that the average period of hospitalization is usually about one month. The mortality from empyema is practically nil and the deaths recorded are usually in the cases admitted late, in the very young under one year or from complications which prove too much for a body already struggling with a severe infection.

Fractures

The management of fractures in the young differs very little from that in the adult. In the child there is softer consistency of the bones, which renders them less brittle and therefore less liable to comminution and more liable to the incomplete or the green stick fracture. The more vascular peri-

osteum and softer texture are factors which develop quicker repair under favorable conditions. The diagnosis may be easy as it often is in the adult, but an x-ray should be taken in every case both before and after reduction to complete the record.

The same mechanical principles must be applied in the treatment of fractures in the child and adult. Early reduction and accurate adjustment of the fragments is important with the necessary form of fixation applicable to the type of fracture. Because of the shorter time required for union, the period of immobilization will be less, and this depends upon the amount of callus observed in the follow-up x-ray examinations. Subsequent to immobilization there is less need for ambulatory splints but physiotherapy measures assist in shortening the period of disability.

Osteomyelitis

Acute osteomyelitis is one of the most serious diseases of childhood. It is serious because of the possibility of a septicemia, which may terminate fatally; because of permanent crippling that may result and because of a long convalescence that may follow even with the best surgical care.

Many theories have been advanced relative to the etiology and the one generally accepted is that it is a blood-borne infection with the portal of entrance at some infected focus elsewhere in the body. The process in the bone is a thrombo-embolic phenomenon, characterized by a thromboarteritis or thrombophlebitis with necrosis of bone cells. Either the nutrient artery or one of its branches becomes occluded. Trauma in about 40 per cent of the cases is considered a contributing factor. The early diagnosis of acute osteomyelitis requires careful analysis of the differential points. Pain and tenderness of the bone near a joint in the presence of fever should always arouse suspicion and this clinical picture justifies consultation if there is doubt as to the diagnosis. X-ray in the acute stage is of no value.

The treatment is essentially surgical and the earlier the diagnosis can be made and drainage instituted the better is the prognosis. A few drill holes in the shaft at the site of greatest localized tenderness and removal of the cortex between these trephine openings many times suffices, the wound be-

ing packed lightly with vaseline gauze. Following this surgical procedure, complete immobilization in plaster, including the joint above and below to provide physiological rest of the extremity, is important. The need of a blood transfusion or intravenous saline and glucose will depend on the condition of the child. Minimizing the surgical dressing is to be encouraged after the method of treatment advocated by Orr.¹³

The Spleen

The indications for splenectomy,¹⁵ which is having a constantly increasing vogue, are arrived at chiefly empirically, by trial of the operation, as the fundamental etiologic factors of the conditions in which it may be of service are not well understood.

In general, the reasons for performance of splenectomy fall into four categories:

1. To put a stop to a perverted, pernicious activity of the spleen, conveniently designated "hypersplenism" (hemolytic icterus, purpura hemorrhagica, erythroblastosis fetalis, sickle-cell anemia).

2. To check the progress of pathologic changes in the splenohepatic circulatory system (splenic anemia, splenomegaly with early gastric hemorrhage).

3. To rid the body of the burden of an organ grossly enlarged and rendered useless by disease (erythroblastic anemia, leukemia, Gaucher's disease).

4. To remove a lurking place for certain types of chronic infection (lues, malaria, undulant fever, tuberculosis).

Results are reported of twenty-nine splenectomies performed upon children. Of these, six were for hemolytic icterus, four for sickle-cell anemia, five for erythroblastic anemia, two for erythroblastosis fetalis, six for purpura hemorrhagica, and five for different types of "splenic anemia."

Hemolytic Icterus.—This is the condition in which splenectomy has scored its greatest success. All of our patients seem to have recovered completely from the primary disorder, with no signs of recurrence. One has had trouble from postoperative adhesions and duodenal ulcer. We have avoided operating during the hemoclastic crises.

Sickle-Cell Anemia.—The rôle of the spleen in the pathogenesis of this disorder is not clear. In our cases the anemia has been little benefited by the operation, but the abdominal and joint crises have been allevi-

ated, and in one case epileptiform attacks ceased after the splenectomy.

Erythroblastic Anemia.—Splenectomy in this disease has not appreciably altered the course of the anemia. It is followed by a remarkable, permanent increase in circulating normoblasts. The patients are considerably relieved by freedom from the weight of the greatly enlarged spleen, and may live somewhat longer.

Erythroblastosis Fetalis.—In our two cases, and in one of which we have knowledge in another clinic, splenectomy promptly checked the rapidly progressing hemolytic anemia. Considering the gravity of the condition we believe that the operation should be performed as soon as the diagnosis is made.

Purpura Hemorrhagica.—Results here are nearly as good as in hemolytic icterus. So far as possible, unless the thrombocytopenia is obstinate, we avoid operating after a single bleeding episode, as the majority of the cases are of the secondary type, and recover spontaneously. Of the six patients operated upon, four recovered completely, one has had a single slight recurrence, and one, operated upon during a very severe bleeding episode, died. Here, as in hemolytic icterus, we avoid operating during crises, except as a last resort.

Splenic Anemia.—Two patients, exhibiting the syndrome with splenomegaly, leukopenia and anemia, often called the first stage of Banti's disease, seem to have been cured by splenectomy. Of three, having splenomegaly and anemia without the characteristic leukopenia, apparently secondary to infection, one has died, and two have gone on to the late stages of the Banti syndrome with hemorrhage and cirrhosis.

We have had one case of the condition with splenomegaly and early gastric hemorrhage, which was relieved but not completely cured by operation.

We have had no occasion to operate for chronic leukemia or Gaucher's disease, or to remove a focus of chronic infection, though we believe that the operation may be indicated for any of these conditions.

We have not formed definite conclusions regarding recent proposals to remove the spleen for hypoplastic or early aplastic anemia.

Whenever a recurrence of trouble appears after an apparently successful splenectomy

we think that consideration should be given to the possibility of the development of an accessory spleen.

Burns

The treatment of cutaneous burns has attracted the attention and interest of both the clinician and the laboratory worker for years because of the resulting high mortality. Pack⁵ reviewed the statistics of the Metropolitan Life Insurance Company and those of the Department of Commerce and found that 45 per cent of the lethal burns occurring annually in the United States were in children under six years of age. At the Children's Hospital the average age of the burn cases is three years. It is with pride we, in Detroit, refer to the research in this field and the contribution made by the late Doctor Edward C. Davidson.⁴ Many theories have been advanced to account for the toxemia associated with a burn and there is convincing evidence of a toxic substance being formed at the site of a burn, the absorption of which is responsible for the constitutional reaction. Working on this theory Doctor Davidson concluded that some form of local treatment would prevent or minimize absorption from the site of burn. Tannic acid, which is a protein precipitant, he found, would decrease absorption and hold the decomposition products out of solution, by forming more or less stable compounds, which are insoluble and held upon the surface. As a result of his work the use of tannic acid has not only simplified the treatment of burns but the mortality figures for the first 48 hours have been reduced from about 36 per cent to less than 10 per cent. This form of treatment has been universally adopted and stands today as one of the great medical contributions.

The technic of handling the burn case is comparatively simple, although complete. The child admitted has all the debris removed from the area involved, the blisters opened, and the loose skin resected with as little trauma as possible. The child is then placed on a sterile sheet in a light tent and the (5 per cent) aqueous solution of tannic acid sprayed over the raw surface with a Devilbiss atomizer by the nurse, who will continue the spraying every fifteen minutes until the burned area becomes a light brown

color. This coat or protective coagulum not only protects the body from the loss of fluids at the site of the burn but serves to relieve pain and if the child survives this coating it acts as a bridge during the stage of epithelization, which in second degree burns is two to three weeks. Doctor Davidson showed that there was a marked concentration of blood and that if this was permitted to exist it was soon incompatible with life. He also showed that there was a hyperglycemia and loss of blood chlorides during this initial period. Because of these facts, normal saline is given subcutaneously and glucose 10 per cent intravenously. In the very extensive burns, blood transfusion is done as promptly as possible before shock has occurred. The burn case admitted with gross infection is best treated by frequently spraying the aqueous solution of gentian-violet¹ 1 per cent, to the burned area after it has been cleaned. There is also a decided advantage placing the patient in a continuous saline bath² during the day and applying vaseline gauze at night.

The third degree burn should be prepared early for skin grafting. In some instances this has been started as early as the third week and if the area is large the grafting must be done in stages. The Reverdin pinch graft is the one used and this method has been found the most efficient. Early grafting limits the scarring producing deformity and by covering the raw area minimizes the absorption from an infected area. Many children have been observed to have a profound anemia about the time they are ready for grafting and because of this, blood transfusion is often resorted to previous to the grafting to insure a satisfactory result. The treatment of the severe burn case does not usually end with the grafting, as many may require plastic operations such as swinging pedicle flaps, the use of inlay skin grafts and even resection of some of the grafted areas later to better the cosmetic results.

Time will not permit the discussion of the many other interesting conditions observed in children. The outstanding factor remains that children in themselves offer an interest that is stimulating and refreshing, because they react so readily and their natural resistance is so great. The old teaching, which never despairs of a sick child, is only too true.

Bibliography

1. Aldrich, Robert H.: The rôle of infection in burns. *New Eng. Jour. Med.*, Vol. 208, No. 6, pp. 299-309, February 8, 1933.
2. Blair, V. P.; Brown, J. B., and Hamm, W. G.: Early care of burns and the repair of their defects. *Jour. A. M. A.*, 98:1355, 1932.
3. Coe, Herbert E.: Surgical pediatrics: critical review. *Jour. Pediatrics*, Vol. 111, No. 2, (Aug.) 1933.
4. Davidson, E. C.: Tannic acid in the treatment of burns. *Surg., Gynec. and Obst.*, 41:202, 1925.
5. Davidson, E. C., and Penberthy, G. C.: The treatment of burns in children with tannic acid. *Detroit Proc. Inter-State Post-graduate Med. Assn. of N. Amer.*, 1929, pp. 265-268.
6. Ebeling, W. W.: Absorption of dextrose from the colon. *Arch. Surg.*, 26:134, 1933.
7. Ewald, Fritz: The suitable time for operations in childhood. *Munchener Medizinische Wochenschrift*, 76:1708-1714, (Oct. 11) 1929.
8. Graham, E. A.: *Empyema Thoracic*. C. V. Mosby Company, 1925.
9. Graham, H. J.: Acute appendicitis in children. *Jour. Indiana Med. Assn.*, 26:3, 1933.
10. Griers, Walter: *Surgery in children*. Arch. Pediatrics, 45:285, 1928.
11. Hill, R.: *Surg., Gynec. and Obst.*, 18:616, 1914.
12. Kelly, Samuel W.: *Surgical Diseases of Children*. C. V. Mosby Company, St. Louis, 1929.
13. Orr, H. Winnett: *Osteomyelitis and Compound Fractures*. C. V. Mosby Company, 1929.
14. Orr, T. G.: Water and chemical balance in surgery. *Amer. Jour. Surg.*, 18:279, 1932.
15. Penberthy, Grover C., and Cooley, Thomas B.: Results of Splenectomy in Childhood. *Ann. Surg.*, (Oct.) 1935, J. B. Lippincott Company.
16. Perusse, G. L., Jr.: Solution of choice in proctoclysis. *Surg., Gynec. & Obst.*, 54:770, 1932.
17. Pizzagalli, L.: Notes on Infantile Surgery. *Boll. d. Spec. Med. Chir. Milano* 1:352-382, (October-December) 1927.
18. Strauss, Alfred A.: *Jour. Amer. Med. Assn.*, Vol. 71, No. 10, (Sept. 7) 1918.

THE INCIDENCE, DIFFERENTIAL DIAGNOSIS, AND IMMEDIATE AND REMOTE PROGNOSIS OF THE TOXEMIAS OF LATE PREGNANCY*

C. H. PECKHAM, M.D.†

BALTIMORE, MARYLAND

That the problem of the toxemias of late pregnancy is still very much alive in the minds of investigators in the field of obstetric medicine is evidenced by the large number of articles on this subject which appear each year in various journals. Most of the recent articles deal with the important questions of the etiology and therapy of these several conditions. Despite the great amount of work which has been done, it seems fair to state that at the present time we know little if any more concerning the actual cause of eclampsia and its allied syndromes than in the decades past. It would appear, however, that an extremely hopeful field is being investigated by students of endocrinology and it is possible that the immediate future may see the solution of these vexing problems. Undoubtedly the therapy, and particularly prophylactic therapy, has improved, at least in terms of mortality results to mother and child. It must be emphasized that the various forms of treatment now in current usage justify themselves only in terms of clinical results, and must be considered as empirical until the actual facts of etiology are understood.

Whereas the scientist has been interested in the abstract problem of etiology, the practicing obstetrician has centered his activity upon the prophylaxis of eclampsia, a matter which includes the prevention and early treatment of the milder toxic manifestations, so often grouped together under the rather unfortunate generic term "pre-

eclamptic toxemia." Considerable success has attended these efforts and this century has witnessed a definite decline in the incidence of eclampsia itself. Thus, it is estimated that in France only a third as many cases are observed at the present time as in 1900. If one were to criticize the clinician with reference to the care of patients with toxemia of pregnancy, it might be done with the statement that they have suffered from the short-sighted policy of abandoning them subsequent to discharge from the hospital, or, at the latest, at the end of the puerperium. Recently, however, it has been pointed out that careful and prolonged observation of these women after delivery is necessary in order to determine whether or not they ultimately become quite normal or are left with the signs and symptoms of hypertensive disease. It has been found that frequently one to two years must elapse before such a decision can be made with any degree of certainty and occasionally even at that time a diagnosis cannot be accurately

*From the Department of Obstetrics, the Johns Hopkins University and Hospital.

†Dr. Peckham is a graduate, A.B., of Brown University in 1919. He received his M.D. from Johns Hopkins Medical School in 1923. His specialty is obstetrics. He is associate obstetrician, Johns Hopkins Hospital. This paper was read before the Wayne County Medical Society in January, 1936.

adduced. The obvious advantage to the patient from such a follow-up study lies in the treatment of the disease process, if present. Another important result of this observation lies in the establishing of a prognosis for a subsequent pregnancy, since the grave effects of gestation on the course of nephritis are now generally agreed upon. It is my opinion, however, that the problem does not end here, since all too frequently a toxemic patient who has apparently become entirely normal at some period after delivery will, in a subsequent pregnancy, evidence similar signs and symptoms and eventually be definitely recognized as a case of cardio-vascular-renal disease.

In the following paragraphs of this communication the still problematical features of the etiology of the toxemias of pregnancy are omitted. The discussion will be limited to the three points listed thus:

1. The importance of the late toxemias in terms of incidence, fetal mortality, and immediate maternal mortality.

2. Some points in differential diagnosis between the nephritic and non-nephritic groups.

3. The remote prognosis and the outlook for subsequent pregnancies.

It should be stated at this point that the classification of the toxemias to be employed is that proposed by Stander and the author in 1926, with the amended criteria for Low Reserve Kidney as suggested by Stout and myself in 1935. Thus, "pre-eclampsia" becomes sharply delineated into a group of cases in which an eclamptic outbreak seems actually imminent, and is almost identical with eclampsia except that convulsions and coma are absent. "Low reserve kidney" is a clinically mild toxemia, occurring only in primiparæ, manifesting itself usually not before the last month of pregnancy, clearing up rapidly in the puerperium, and not recurring in a subsequent pregnancy. Such a classification necessitates a large group of "unclassified toxemias," whose ultimate diagnosis cannot be made until, after protracted follow-up study, the situation seems clear. Comments upon the methods of arriving at the proper diagnosis in individual cases will be discussed in a later paragraph.

A. Incidence

It is impossible to obtain an accurate figure as to the incidence of the toxemias of

TABLE I. THE INCIDENCE OF THE TOXEMIAS OF LATE PREGNANCY AS OBSERVED AT THE JOHNS HOPKINS HOSPITAL

	Total Clinic Patients House and Outside	Regis- tered Patients House and Outside	Regis- tered Hospital Patients Only
Eclampsia	0.70%	0.32%	0.44%
Preëclampsia	0.75	0.90	1.17
Low Reserve Kidney	13.26	12.29	5.17
Nephritis			6.51
Unclassified			3.99
Total Incidence	14.71%	13.51%	17.28%

late pregnancy for the childbearing population at large. Maternity hospitals, to a considerable extent, function as clearing-houses for obstetric complications and do not portray community conditions. It is probable that certain racial and seasonal differences in incidence exist and it has been suggested that there are climatic variations as well. We may assume, however, that conditions in the northern and central parts of the United States are reasonably comparable and the following table shows the incidence of the toxemias of late pregnancy as found at the Johns Hopkins Hospital in Baltimore.

The "total clinic patients" series includes a number of referred emergency admissions with a high incidence of severe toxemias together with many patients registering for prenatal care so late in pregnancy that they paid not more than two visits to the dispensary prior to delivery. The bulk of cases represented in this series and all of the patients in the other two groups had received "adequate" prenatal care, with a minimum of three and an average of eight dispensary visits before delivery. The "outside" series, consisting of patients delivered in their homes, comprises about a quarter of the total cases and consists almost entirely of normal multiparæ. This group of patients is included to counterbalance the hospital series and in order to portray a more accurate picture of conditions in the community at large. From Table I it will be seen that the incidence of toxemias of late pregnancy for the total clinic population was 14.71 per cent and among registered hospital patients was 17.28 per cent. It is believed that the middle column of the table is the most accurate and here the total incidence is 13.51 per cent. Eclampsia developed despite prenatal care in 0.32 per cent of total admissions or one in 311, while pre-

eclampsia was seen in 0.90 per cent of the group giving an incidence of severe fulminating toxemia of pregnancy amounting to 1.22 per cent. For the registered hospital cases the differential diagnosis between low reserve kidney and nephritis has been made whenever possible at a period of not less than two years after delivery. It will be seen that the cases of nephritis outnumber those in any other rubric and are about equivalent to the groups eclampsia, pre-eclampsia and low reserve kidney combined. Furthermore, it will be noted that even after a minimum of two years of careful study about a quarter of the total toxemias could not be accurately catalogued and still had to be termed "unclassified." Careful follow-up over a much longer period would probably divide these cases into the low reserve kidney and nephritic groups in about the proportions shown in the table.

In passing, it may be stated that the incidence of 17.28 per cent toxemias in total registered hospital patients coincides almost exactly with the figure of 17.22 per cent noted by Stander at the New York Lying-In Hospital.

It is our opinion that the incidence of toxemia of pregnancy for the child-bearing population at large, based on the finding at any time during pregnancy or the early puerperium of a blood pressure whose systolic reading reaches 140 and diastolic 90, or the presence of a trace or more of albumin in the urine, is between 10 and 15 per cent.

B. Per Cent of Total Maternal Deaths Due to Toxemia

Even more important than the extreme frequency of the toxemias is the large number of maternal deaths due to them.

TABLE II. THE RELATION OF DEATHS DUE TO TOXEMIAS OF LATE PREGNANCY TO TOTAL MATERNAL DEATHS

Source	Per Cent of Total Maternal Deaths
England and Wales	15.7
Scotland	16.8
Manchester	18.7
Glasgow	25.3
New York City	12.2
Chicago Lying-In (DeLee)	21.1
Boston Lying-In	23.4
New York Lying-In	25.0
15 States of U. S.	25.7
Johns Hopkins Hospital	28.1
Emory-Atlanta	31.7

It is usually stated that the toxemias of pregnancy are outranked only by puerperal infection as a cause of maternal death. Table II indicates a considerable variation according to source but it would seem safe to state that in this country between 20 and 25 per cent of the total maternal deaths are due to the late toxemias. It should be remembered that these figures are in terms of immediate deaths—during pregnancy, labor, and the early puerperium—and do not include the remote mortality from a nephritis which has been initiated by a toxemia or accelerated by the process of gestation.

C. Maternal Mortality According to the Type of Toxemia

TABLE III. MATERNAL MORTALITY ACCORDING TO TYPE OF TOXEMIA

Type of Toxemia	Mortality Per Cent
Eclampsia	11.0
Preëclampsia	0.0
Low Reserve Kidney	0.0
Nephritis—Immediate	5.5
Nephritis—Late	42.5
Unclassified and Atypical	1.1

Table III gives the mortality percentages according to type of toxemia in the cases observed on the Obstetric Service of the Johns Hopkins Hospital. The 11 per cent death rate from eclampsia is derived from a series of 127 patients treated by the modified Stroganoff régime in the last ten years. It is interesting to note that in instances of eclampsia developing in registered patients the mortality rate was 7.14 per cent as contrasted with 12.90 per cent in referred emergency cases. Attention is called to the figure of 42.53 per cent mortality within ten years of delivery in cases definitely diagnosed as nephritis and to emphasize that this rate is due to nephritis alone, since deaths from other causes have been omitted in the calculation.

D. Fetal Mortality According to the Type of Toxemia

TABLE IV. FETAL MORTALITY ACCORDING TO TYPE OF TOXEMIA

Type of Toxemia	Fetal Mortality	Total Mortality
Eclampsia	39.37%	39.37%
Preëclampsia	16.00%	17.66%
Low Reserve Kidney	8.22%	9.46%
Nephritis	18.57%	25.49%
Unclassified	10.79%	.....

In Table IV the column "fetal mortality per cent" is based on stillbirths and neonatal deaths occurring in viable children, while to these have been added under "total mortality per cent" those fetuses lost by abortion either spontaneous or therapeutic. The high number of fetal deaths in cases of eclampsia has long been emphasized, whereas the rather gloomy outlook for the child in other forms of toxemia has to a considerable extent been disregarded. The figures shown here indicate that in preëclampsia more than a sixth of the babies do not survive, while in nephritis the total mortality reaches the high level of 25.49 per cent. In passing, it might be suggested that these figures would seem to render dubious the wisdom of attempting to carry on a pregnancy when the toxemia appears before the child is viable and that in the presence of severe toxemic manifestations the outlook for the child is so poor that it should have little effect on the treatment of the patient.

E. Some Points in Differential Diagnosis

As has been stated, the two most important aspects of the treatment of toxemic patients are the prevention of eclampsia and the early recognition of nephritis. The former is being done with a considerable degree of success by the practicing obstetrician, but it would seem that the latter frequently suffers from neglect and it is to this that I shall confine my remarks at this point.

Whether the patient has hitherto been normal and is suffering from a toxemia of pregnancy, or whether she has an underlying cardiovascular disease or arteriosclerotic process which is being aggravated by the pregnancy, is a decision which is frequently difficult and sometimes impossible to make until long after delivery. Whether the patient returns entirely to normal or is left with a definite nephritic process, which a subsequent pregnancy will further aggravate, requires prolonged and intensive follow-up study. Yet one should attempt to give the patient who has had any manifestations of toxemia during one pregnancy a prognosis for a subsequent one. Certain points of aid in establishing the nephritic or non-nephritic character of the condition are shown in Table V.

1. *Age and parity of patient.*—Table V indicates that the toxemic patient most likely to be left after pregnancy in a normal condition is the primigravida and one in the

TABLE V. AGE AND PARITY OF TOXEMIC PATIENTS

A. Total Cases of Toxemia—Excluding Eclampsia		
Age at Time of Toxemia	Ultimate Status	
	Normal	Nephritic
Under 25 years	66.66%	24.82%
25 to 34 years	25.26	42.34
35 years and over	8.09	32.85
Parity		
Primiparæ	66.67%	18.98%
Multiparæ	33.33	81.02
B. A Group of Patients Whose Toxemia Occurred in the First Pregnancy		
Age at Time of Original Toxemia	Ultimate Status	
	Normal	Nephritic
	Cases %	Cases %
Under 20 years	24}	25}
20 to 29 years	19} 97.73	27} 80.00
30 years and over	1 2.27	13 20.00

relatively early years of her childbearing career. Conversely, nephritis is much more apt to be associated with multiparity and advancing gestational age. It would appear that whenever hypertension and albuminuria manifest themselves in a multipara, and particularly if the previous pregnancies have been uncomplicated, the prognosis becomes ominous and the changes are markedly increased so that within a few years there will be found a definite arteriosclerotic process. Furthermore, we believe that it is safe to say that a prolonged and unrestricted childbearing career in a woman who has shown evidence of toxemia in any pregnancy is fraught with considerable danger since our experience is that such women ultimately show a much higher incidence of nephritis than a similar group whose pregnancies have been less frequent.

There is appended to Table V a chart made up from a group of women having a clinically mild toxemia with their first pregnancy and then followed throughout their subsequent childbearing. You will notice that of fourteen women pregnant for the first time at the age of thirty or over and developing a toxemia during this pregnancy, thirteen ultimately were classified as nephritic. This is too small a series to warrant a positive statement but would seem to indicate a danger to further childbearing in the elderly primipara with toxemia.

2. *Time of onset of hypertension or albuminuria.*—Unfortunately, many women do

TABLE VI. TIME OF ONSET DURING PREGNANCY OF HYPERTENSION OR ALBUMINURIA

Lunar Month	Ultimate Status	
	Normal Cases	Nephritic Cases
4	0	15
5	0	13
6	0	21
7	4	34
8	8	58
9—Term	156	46
	92.86%	75.40%
		24.60%

not seek medical advice until they are in the last trimester of pregnancy, and if at this time hypertension or albuminuria is already present this feature is of no differential value. However, it seems evident from a study of Table VI that the toxemic condition which will ultimately clear up entirely does not manifest itself prior to the seventh lunar month and only rarely before the ninth. It has become our custom to regard the presence of hypertension in the first two-thirds of pregnancy as an evidence of nephritis unless proved otherwise. However, a certain number of women will develop late in pregnancy toxemic manifestations, usually severe in character, with the provisional diagnosis being typical eclampsia or pre-eclampsia, and will be left with permanent hypertension. The time of onset of the toxemia is often the most valuable point in differential diagnosis at our disposal.

3. *Degree of hypertension and amount of albuminuria.*—At this time it should be emphasized that in our experience the degree of hypertension and amount of albuminuria occurring during pregnancy afford no criteria as to the nephritic or non-nephritic character of the process at hand. Moreover, the presence or absence of these signs at the time of discharge of the patient from the hospital is not reliable, since weeks often elapse before the blood pressure returns to normal and the urine becomes albumin-free in patients ultimately showing no residuum. Even six weeks after delivery a margin of error persists. Furthermore, renal function tests and chemical examination of the blood are of little value except in far advanced cases where they are not needed for diagnosis.

4. *Eyeground examination.*—That careful examination of the eyegrounds is frequently a great aid in establishing a diagnosis and prognosis for cases of toxemia of pregnancy has been known but not fully ap-

preciated for some time. The aid of an experienced ophthalmologist is invaluable in the proper care of such patients and some knowledge of this field should be had by all practicing obstetricians. A number of articles have appeared dealing with the changes in the retinal arterioles in toxemia of pregnancy. I should like to refer to the excellent paper of H. P. Wagener which appeared in the *Journal of the American Medical Association*, issue of October 28, 1933. "Usually the first visible sign is a narrowing of the arterioles of the retina which may affect any or all of the branches of the central artery. This narrowing is often accompanied or followed by irregular constriction of the lumen of the arterioles which may vary in degree and situation from day to day. Later, as the narrowing and constrictions become more fixed, individual cotton-wool patches and hemorrhagic areas may appear in the retina, and finally, diffuse retinitis of the albuminuric type may develop. . . . The variability of the narrowings and constrictions and their usual tendency to rapid disappearance after the termination of the toxemia certainly suggest that they are visible signs of an angiospastic rather than an angiosclerotic lesion. The apparent permanence of some of the vascular changes indicates, however, that at some stage of the spastic process actual organic changes occur. It has seemed probable that constrictions and irregularities which are still present two weeks after delivery are sclerotic and no longer simply spastic. . . . The spastic lesions occur both in acute toxemia and in toxemia superimposed on previous vascular or renal disease. Spastic lesions occur in about 70 per cent of cases of toxemia. In about 60 per cent of cases the spastic lesions disappear with the termination of pregnancy and the blood pressure returns to normal or to its previous level. In about 40 per cent of cases, organic lesions develop in the arterioles often in association with retinitis. In such cases elevation of blood pressure usually persists. Diffuse retinitis of the albuminuric type is to be regarded as evidence of severe generalized arteriosclerosis rather than of primary nephritis."

This rather extensive quotation from Wagener's article is included in order to portray the eyeground changes in toxemia of pregnancy and to form a basis for the following statements. Every pregnant woman who manifests signs or symptoms of tox-

emia should immediately have an ophthalmoscopic examination. If spasm of the retinal arterioles is found and the patient has not reached the last trimester of gestation, termination of the pregnancy should be considered in view of the fact that prolongation of the spasm over a period of months is likely to produce an organic process and the patient be left with generalized vascular disease. The eyeground examination should be repeated at frequent intervals and if either hemorrhage or exudate develop, labor should be induced. Six weeks or more after delivery a final examination should be made in order to determine whether all signs have disappeared or sclerosis remains, in order to give a prognosis for a subsequent pregnancy.

5. *Repeated toxemias.*—Frequent comment has been made upon the tendency of toxemias to repeat themselves in subsequent pregnancies and the significance of each repetition does not seem to have been fully appreciated. Our experience would indicate that the development of a "repeat toxemia" occurs in the majority of instances on a nephritic basis and should be treated accordingly.

TABLE VII. PREGNANCY FOLLOWING TOXEMIA

No. of Repeated Toxemias	Ultimate Status	
	Normal Cases	Nephritic Cases
0	153 91.07%	3 1.60%
1	13	110
2	2	43
3	0	26
4	0	5
	8.93%	98.40%

Table VII indicates the ultimate status of a group of 355 patients followed eight years from the standpoint of reappearance of toxemic signs and symptoms in subsequent pregnancies. From the figures shown here it seems clear that a second manifestation of hypertension or albuminuria, even in the presence of negative findings during the interval between pregnancies, means, with only a small margin of error, that chronic hypertensive disease will eventually become evident. In only fifteen of the 168 so-called normal cases was there a repeated toxemia during a subsequent pregnancy and it is our opinion that, although apparently normal at the time of this study, these patients will eventually find a place in the nephritic group. Thus, several of them have chronic headache and backache and the blood pres-

sure readings, particularly the diastolic, are very near the upper limit of normality. On the other hand, there were only three of the 187 patients with nephritis who did not have an obvious toxemic process during subsequent pregnancies.

F. Remote Prognosis and the Outlook for Subsequent Pregnancies

1. *Eclampsia.*—Until recently it was taught that if a patient survived an eclamptic attack her subsequent obstetric course would probably be toxemia-free and that the chances of a second convulsive episode were about nil. More recent investigations would seem to indicate that such is not the case. In a study of seventy-four eclamptic patients in 1929 we found that three had had a second attack and several writers have estimated the incidence as between one and four per cent. In the last few years the author has seen a patient suffer attacks of mild postpartum eclampsia following three successive deliveries. In the same series of seventy-four patients it was found that one year after delivery seventeen, or 23 per cent, showed definite evidence of chronic vascular disease. Sixty-one of these patients were subsequently restudied three or more years after delivery when the incidence of nephritis was found to have risen to 37.7 per cent. It is not my intention to convey the impression that all these women owed their nephritis to the eclampsia since the correct original diagnosis in many of them was undoubtedly "eclampsia superimposed on chronic nephritis." However, a careful study of the records would seem to indicate that a number of these patients had been entirely normal before pregnancy and first showed evidence of chronic vascular disease shortly after the convulsive attack.

Furthermore, we have recently reviewed a series of twenty-seven eclamptic patients who were followed through one or more subsequent pregnancies. In fifteen of them (55.6 per cent) toxemia again manifested itself and at the present time eleven of the latter have permanent hypertension and sclerotic changes in the retinal vessels. Even the evidence of a normal pregnancy following one complicated by eclampsia does not warrant dismissal of the patient from further concern for occasionally two or three pregnancies may intervene before another toxemia occurs.

It would appear, then, that the remote

prognosis for the eclamptic woman is unfavorable and that further pregnancies are to be advocated only after careful study. Experience would indicate that the incidence of nephritis and repeated toxemia increases proportionately with the severity of the initial eclampsia, and particularly in the antepartum variety. Finally, the remote prognosis for the multipara with eclampsia seems particularly grave although the immediate mortality rate is low.

2. *Preëclampsia*.—The remote prognosis of preëclampsia resembles that of eclampsia although to a diminished extent. In a series of patients studied several years following an attack of severe fulminating toxemia which did not go on to the convulsive stage, 22.6 per cent of them evidenced vascular changes. In another series of forty-five patients presenting the same condition, who had been followed through one or more subsequent pregnancies, 37.8 per cent had a repeated toxemia. A number of these cases were undoubtedly instances of what might be termed "preëclampsia superimposed on chronic nephritis." However, it seems reasonable to suppose that an acute and fulminating process such as this, even if it does not go on to the appearance of convulsions and coma, would on occasion leave the patient with a permanent cardio-vascular-renal derangement.

3. *Low reserve kidney*.—In accordance with its postulation the prognosis following low reserve kidney is excellent, since nephritis does not follow and the condition may not recur in a subsequent pregnancy. However, it must be remembered that a diagnosis of "low reserve kidney" made during gestation or in the early puerperium is only tentative and becomes definite only after prolonged follow-up study or following another and normal pregnancy. Frequently patients have been observed who, following an apparently mild toxemia developing late in pregnancy, evidenced a marked and persistent hypertension in the late puerperium and thereafter. The accompanying diagram (Fig. 1) demonstrates the course of a patient of this type.

4. *Nephritis*.—Little need be said concerning the remote prognosis of nephritis. As indicated, our experience has been that 42.5 per cent of patients upon whom this diagnosis is made succumb within ten years, whereas the normal death rate for all causes in women during this decade of life is 8 per

cent. It is my earnest opinion that this high mortality figure might be decreased materially and the life expectancy of patients with this chronic process proportionately length-

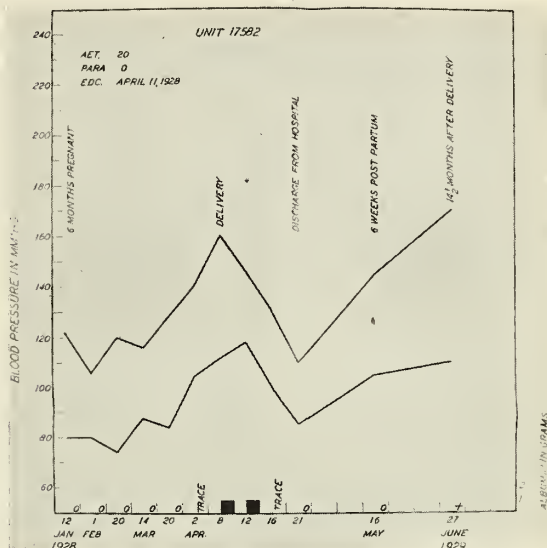


Fig. 1. Nephritis following apparent toxemia of pregnancy.

ened if further childbearing be avoided once the early diagnosis is made. There is no question but that gestation accelerates the disease process and hastens the fatal outcome.

5. *Unclassified*.—During the five-year period of 1928-1932, 27.3 per cent of the toxemic patients coming under our observation left the hospital after delivery with the diagnosis "toxemia unclassified." During the years 1933 and 1934 this incidence rose to 49.1 per cent. Experience has shown that a definite diagnosis made during pregnancy or the early puerperium is attended with a large margin of error and hence is dangerous since it carries with it a prognosis for a subsequent pregnancy. It is our policy to regard an early diagnosis, when made, as strictly tentative and to render a final opinion only when the situation deems it definitely evident after prolonged follow-up study. Even after two or more years, however, a positive statement frequently cannot be made and in a series of 481 toxemic patients which we have studied recently 126, or 26.2 per cent, of them were still catalogued as "unclassified" at the end of this time. Thus, the patients in this group had had a toxemia suspiciously nephritic in character, a repeated toxemia, or at the time of the study had a blood pressure near the

upper limit of normality associated with sufficient other signs and symptoms to render the ultimate diagnosis obscure.

6. *Conclusions.*—From what has been said in this discussion of the toxemias of pregnancy, it is my opinion that the following practical generalizations may be made.

The prenatal care of patients with toxemia of pregnancy has two main objects—the prevention of eclampsia and the early recognition and prompt treatment (in so far as the pregnancy is concerned) of nephritis. One cannot be too cautious in the case of the preëclamptic woman and prompt termination of the pregnancy (either by induction of premature labor or even by Cesarean section in the extremely fulminant case) is definitely indicated at any time in order to prevent a convulsive attack. A definite and clear-cut diagnosis of nephritis complicating pregnancy also indicates the immediate emptying of the uterus. Only when the process seems mild or when the patient and her family, in full knowledge of the risks involved, demand it, is one justified in temporizing for the sake of the child. In such cases the gloomy prognosis for the child renders still more dubious the wisdom of such a course.

Following delivery it is better to catalogue temporarily the toxemic condition as unclassified (unless nephritis is already evident) or to regard the diagnosis of type as tentative. The patient should be seen at least every three months, when the blood pressure should be taken, the urine examined for albumin, and careful questioning done for suspicious symptoms. At each alternate visit ophthalmoscopic examination of the retinal vessels should be included. During this period of observation the patient should be cautioned against again becoming pregnant and contraceptive advice given if necessary. In the majority of cases the situation will be reasonably clear within two years and depending upon the status of the patient at that time advice may be given

concerning a subsequent pregnancy. The patient who has once manifested a toxemia should be carefully followed for the remainder of her childbearing career in view of the tendency for the process to repeat itself, although not necessarily in the next pregnancy. As has been said, we believe the ultimate prognosis for the woman who has a "repeat toxemia" to be extremely dubious, even though in the interval between pregnancies she has seemed normal.

If at the end of two years, or before, the diagnosis of a chronic vascular process becomes evident, future childbearing is definitely contraindicated, contraceptive advice should be freely given and some sterilizing procedure performed if necessary. Such a course will offer a prolonged life expectancy to the woman of this type.

If at the end of two years the diagnosis is still not clear, the rendition of proper advice to the patient becomes difficult. The more conservative course would be to defer another pregnancy still longer, since at the present time we are following a group of nephritic women in 30 per cent of whom the diagnosis did not become fully evident until four or more years had elapsed subsequent to the first toxemic pregnancy. Certainly if the "unclassified" patient earnestly desires another pregnancy she should be followed with the utmost caution, and told in advance that a definite chance exists that successful completion of gestation may not be possible. If toxemic signs again become manifest early in pregnancy, termination is indicated, and if late, it is much safer to terminate finally the reproductive function.

Some of these conclusions may sound radical, and it may be suspected that I have drawn an unduly pessimistic picture of the toxemias and their late results. However, it is my belief that some such routine is necessary in order to prevent or at least defer the large number of deaths which still occur, due in the last analysis to the remote effects of the toxemias of late pregnancy.

DO THE PEOPLE OF MICHIGAN WANT A GUARANTEE OF GOOD MEDICAL SERVICE?

HOWARD H. CUMMINGS, M.D.†
ANN ARBOR, MICHIGAN

For several years articles dealing with medico-economic problems have been appearing more and more frequently in both lay and medical organs of opinion. Not only has the press been employed to discuss medical service in its relation to society, but the lecture platform and the radio have also been used by political parties and their representatives to orate on this most popular and interesting subject. Foundations have spent much time and large sums of money in attempts to ascertain the cost, the quantity and the quality of medical care given in this and other countries. Medical surveys by organized physicians and by lay bodies have been made. Industries, women's clubs, service clubs, industrial groups, hospital staffs, nursing agencies, dentists' organizations and other groups have made a place on their programs, and in their deliberations, for the discussion of medical care. However, the great mass of our citizens has been almost inarticulate on this subject, and physicians, busy day and night with medical and economic problems, have been startled by this sudden demand for better, cheaper, state-wide medical service.

From the beginning of medicine, physicians have pledged themselves to give aid to the afflicted, regardless of the color, creed or financial condition of the sick person. This fact has brought the greatest satisfaction to the physician and has been prized above any material gain. This tradition has also led to evil days for the doctors. In the early days of this country, barter for medical services kept the soul and body of many physicians together. Today, if medical men could barter their services to humanity for groceries, rent, gas, electricity, clothing, automobiles, oil, gasoline, medical books and journals, instruments and equipment, dues to societies and clubs, and traveling expenses; if all city, county, state and federal taxes could be cancelled to balance the services given the indigent, what a Utopian state would be the lot of physicians. They could devote most of their time and efforts to all classes of suffering humanity. However, as prominent and leading citizens, doctors of medicine are expected to pay promptly for every item mentioned, and if they fail to do so, their stay in any community is of short duration.

Knowing well that no physician would fail the indigent patient in time of sickness, our federal, state and local governmental agencies have either provided inadequate funds, or when funds have been exhausted have unloaded the whole problem on the shoulders of the medical profession.

Whenever physicians have coöperated with governmental authorities in reducing fee schedules for services to indigents, various agents have taken the opportunity, by allowing non-indigents and many persons temporarily embarrassed financially, to avail themselves of medical service at a greatly reduced rate, thereby penalizing the coöperating physician. These same agents have taken notes from patients in order to assure the county or state that monies advanced for hospitalization and care would be repaid, but they have refused to allow the physician to make a similar arrangement.

Let us grant that there is a state-wide demand for better medical service. Let us admit that the solution of this problem is, in a great measure, the duty of the medical profession. What obstacles stand in our way and how can they be removed? Should the state educate and train medical men and then turn the problems of health over to inexperienced hands? Would a wise man hire an architect and builder to erect a home, and then insist upon taking the builder's plans and tools and building with his own hands?

Organized medicine has no personal fight with so-called cults or the untrained agencies that seek to gain a foothold in the care of the sick. Our purpose is to protect the lives and improve the health of our people, and to demand that those practicing the

†For professional note see *Journal Michigan State Medical Society*, Vol. 35, No. 2, page 152, (Feb.) 1936.

healing art be adequately trained. Whenever this statement is made, many voices cry out that the physician is more interested in acquiring wealth than in maintaining public health. How can this be? The young person preparing for medicine has behind him the usual grade and high school requirements; before him are from three to four years of studies in literature, sciences and the arts; four years of intensive medical courses; one year internship; and should he desire to practice a special branch of medicine, from two to five years more are required for his training. At the end of this time, if our statistics are correct, he has the privilege of earning from twenty-five hundred to five thousand dollars. It must be apparent, to any thinking mind, that by spending this same time in almost any other profession, one would be in a far better financial condition than the doctor. Only those who use the short-cuts and seek to enter the practice of medicine by the back door are motivated by the desire to make money.

William D. Harrard in an address entitled "What Price Health" said:

"It is surprising the lack of care we give our bodies and the lack of intelligence we sometimes display in the most wonderful of all mechanisms, the human body, the temple of the immortal soul.

"What would you think of a man who would entrust the many intricate things that go wrong in the engine of a motor car to a person who would profess to remedy anything that was wrong with it by rubbing it on the outside? Still, persons who profess to be intelligent, and who really are in other decisions of life, will sometimes leave the care of the treatment of the disease of their bodies to incompetent individuals who make great pretense, and propose to cure the most complicated diseases by adjusting the spine, rubbing on the outside, or reading out of a book and telling people that the disease they are suffering and dying from does not exist.

"Is that not a terrible thing to do for a child that is strangling from the diseased membranes that clog the throat in diphtheria? It is a hard thing to try to enlighten the distressed, though misguided parents in the agony of their sorrow, and tell them that the untruth and dogma allowed their child to die, when intelligent, prompt, scientific administration of anti-toxin would have saved its life. It would be cowardly, if it were not due to ignorance, for anybody to attempt to give spinal adjustments, so-called (which really never did, never can, or never will adjust anything), for a ruptured appendix or for a tumor on the interior of the body that is fast becoming malignant.

"The real case against the cults, fads, sects and isms in human sickness is their inability to understand the many intricate causes of disease, its prevention and its control by scientific sanitation, and the untenable relief of each separate cult that all of the diseases, whether of mind or body, can be cured by a single process; this process differing with each sect. They will treat anybody that will hold still, and one is born every minute. The popularity of the

healing cults is due to those of an unstable, impressionable nervous system, which is always looking for some easy way of treatment, particularly if it is mysterious. The individual is unwilling to purchase health by rational means, but wants some mystical or miraculous occult force to be invoked in his aid."

Inadequately trained persons, in whose hands the public health is jeopardized, are licensed and allowed to practice the healing art. To protect public health and to guarantee to the people of Michigan good medical service, the Michigan State Medical Society will ask the legislature to support a proposed law, whereby every individual licensed to practice the healing art will be required to prepare himself thoroughly and to pass examinations in a satisfactory manner, before he is entrusted with the lives of afflicted persons. The preparation deemed necessary is not unreasonable. There will be required a satisfactory record from an accredited high school, sixty hours of collegiate credit including grammar, rhetoric and English literature, biology, botany and zoology, chemistry and physics. Anatomy, physiology, hygiene and public health, pathology and bacteriology must be studied by all who wish to diagnose disease and to treat the sick. It is also proposed to change the medical practice acts so that those individuals who are now licensed to administer to the sick must comply with the law; must practice only those things specifically mentioned in the acts governing them, and may not extend their practice into obstetrics, surgery, or the administration of medicine and drugs.

To reiterate, lay agencies and groups, by interference with organized medicine in its efforts to distribute good medical service, have placed serious obstacles in the path of the profession. One is amazed at the numerous encroachments by government agencies; the rapid growth of free clinics; the multiplication of foundations directed almost entirely by non-medical men and women that lead the afflicted away from regular medical channels. Relief agencies have taken unfair advantage of the physician by providing insufficient funds for their work, by greatly reducing the fees for medical service and by allowing the non-indigent to participate in these services.

What constructive measures has the Michigan State Medical Society to offer our people? A survey of our state has been made. It shows the medical needs, the

facilities for medical care and the physicians available to carry out this service. A plan has been formulated to guarantee good medical attention to all classes of our citizens. This plan has been developed by practicing physicians who know intimately the medical needs of the people far better than any lay organization could ever know them.

A filter system, wherein physicians act as medical examining boards to pass on the necessity and urgency of medical and surgical care for the indigent in conjunction with an economic filter composed of probate judges and their appointees, has been set up in each county of this state. This system will save the counties and the state a great deal of expense by filtering out the individual who can pay for medical service, and it will protect the interests of the patient, the taxpayer and the doctor.

If medical service is to be of the highest type, every physician must be a student from the day of his graduation to the end of his practice. By no other means can the people of our state be assured of good medical service. Recently there passed from our midst a great and beloved physician, Dr. Charles Godwin Jennings, of Detroit. Fol-

lowing his graduation in 1879, he studied physics, chemistry, French, German and English under private tutors. Until his last illness he was a student of medicine and the long list of his activities and successes can only be explained by his diligence in keeping abreast of medical knowledge.

The Michigan State Medical Society, in conjunction with the University of Michigan and Wayne University, has a plan in successful operation, whereby any physician in the state can attend post-graduate courses in his own vicinity and can obtain a knowledge of all the advances in scientific medicine from our medical schools. This plan assures the people of Michigan the highest type of medical service by progressive physicians.

Do the people of Michigan want good medical service? It is natural to want the best and our people demand it. As physicians united in one cause, and using the instruments now in our hands, we can surmount all of the obstacles that check us and give to the people of the State of Michigan the finest medical service obtainable in this or any other country.

723 Church Street

TEACHING AND LEARNING*

JAMES E. DAVIS, A.M., M.D.†

DETROIT, MICHIGAN

Hippocrates begins his collection of medical aphorisms with the sentence, "Art is long, life is short." The "art of teaching" and the "art of learning" can be pointed out in any age as having distinctly realized this truth.

Comparative examination of methods for instruction of students reveals many striking contrasts. In the same school one may find two or more instructors who are teaching the same subject by different methods. Students of a single instructor and of a single subject may have curiously different basic ways of preparing designated work. Who has the most effective plan leading to mastery of his subject? The usual answer from instructors is, "He who succeeds best and in the shortest time." But this is not the best answer because the individual's reaction and success are limited and may have no application in the law of averages.

Professor A. S. Warthin once told me he

was concerned only with the upper 15 per cent of his class and he refused to be influenced by the remaining 85 per cent. I have never known a greater driving force in the class room. He demanded both an unusual quantity and a high quality of work. Yet that great integrating factor of sympathy and that other asset of trying to get and appreciate the student's viewpoint were lost by this picturesque and forceful teacher.

*Read at the Faculty Meeting, University of Detroit Dental School.

†Dr. Davis is Professor of Pathology, Wayne University School of Medicine.

Professor Dr. Oskar Stoerck, of the University of Vienna, was the greatest and most skilful teacher I have known. He had wonderful scholarship, was an ambidextrous master at blackboard illustrating, lectured brilliantly, completely forgetting himself in the interests of his students. In 1922, not long after the war, I visited the Pathological Institute one evening and was surprised to find sleeping cots in almost every room of his laboratory. Asking the reason for these cots, I was told they were for poor boys without adequate finances who were determined to secure a medical education. Professor Stoerck had a great interest in seeing students help themselves. One day the writer asked him if it would be possible to arrange for personal instruction in his own preferred methods throughout a complete autopsy. The answer was promptly given to be at the Kaiser Franz Joseph Spital on the following day from 10 A. M. until 2 P. M. This proved to be the finest autopsy clinic I have ever witnessed or taken part in. Twenty-eight subjects illustrating a wide variety of pathological changes were personally and painstakingly demonstrated to me, and the last and best subject was assigned for me to do. All of the staff were dismissed but the first assistant. Then followed the best drill and demonstration I have ever experienced. After the method of Sir William Osler, Professor Stoerck stood by or sat upon an adjoining table directing and discussing every step of his preferred technic, until I had completed two splendid hours in the actual prosecution.

One responds promptly and lastingly to personal "coaching." It is as Thorndike says on the first page of his "Educational Psychology," that situations result in responses, and that a man's nature and the changes that take place in it may be described in terms of the responses—of thought, feeling, action, and attitude—which he makes, and of the bonds by which these are connected with the situations which life offers.

There are but few students that do not learn best by doing for themselves what has far too often been done for them by teachers. Every teacher has experienced the thrill of occupying the center of the stage and delivering his message in a manner highly satisfactory to himself. The delight one has in portraying the very limits of his knowledge, even if absolute clarity has not been gained in the range of private thinking, is

well known and has intrigued too many teachers into thinking they were very successful.

Until the teacher's chest swells with pride at the efficiency he has seen exhibited by his students, he has not known the maximum of satisfaction derivable from teaching effort. It is a simple task to review selected parts of the literature upon goiter, and to choose a recognized method of classification of its various types. One can illustrate each type with gross and microscopic sections, sketch the anatomy and physiology of the thyroid, then pass to the symptomatology and treatment, and content himself with the feeling of having thoroughly presented the subject. But the presentation has come from the teacher's hill-top and not from the level of students who are taking a first grasp of the subject. Understanding goiter must come from placing the student in contact with more than an audition upon the subject.

Trial of a method by which each student presents to the class his work-up of the subject and the teacher plays the part of tutor or coach, will bring surprises in results that are superior for class efficiency.

Qualifications for teaching efficiency are not primarily compulsive ability, personal scholarship, professional background, research ability, or teaching experience, but rather *personality, opportunity for student self-expression, enthusiasm, student motivation, and active interest in student development.*

The prevailing quiz program tends to build a stone wall of resistance between teacher and students.

The teacher's psychology too often means a determination to baffle, complicate, or exhaust the student's recently erected structure of knowledge. This is met ordinarily by a resistance program of individual reticence or class planning for advantages that will aid in building up the sum total of credits which are eventually the determining factors of success or failure. Obviously this is entirely wrong and defeats the best purposes in the art and science of learning. Freedom in exchange of knowledge should be sought on the part of both teacher and student. Informal discussions, appropriate coaching, and occasional free exhibitions of experience should be offered in exchange for the privilege of having an audience.

It must be taken for granted that be-

ginners will not be expert in the collection of subject data, nor will they be well enough informed to make proper selection and logical organization of the data; nor will they be able advantageously to make proper assimilation. This type of work cannot be taught in lecture form. It must be given to the student after the same plan as the master mechanic uses to instruct his apprentice. The apprentice assists in work and in due time undertakes his work under direction.

The student on entering college is not a little confused and sometimes absolutely at sea because he has only an assignment of work in his program, while heretofore he has been spoon-fed by the lecturer who required only attendance and memory work, and a final accounting of his stewardship at a final examination. In high school, the student is expected to record, unchanged, the data given in the term lectures. Two courses are open to students so situated. One is to develop an extraordinary memory system, and the other is to cram for the final examination. It will be found that the teacher in such cases is always the leader, the pupil always a follower. The pupil is always a subordinate.

On entering college, this experience for the student is likely to undergo a radical change. Self-direction and initiative and self-discipline now become indispensable and imperative. The new freedom which the student finds for his individuality is strange to him, and directional guidance for this type of situation is too rarely given in the best of colleges.

General discussion of methods of teaching dates back to 469-399 B. C. when Socrates established one historic example of a great teaching method. Then later, Christ, in the Sermon on the Mount, doubtless established the most effective method in history, if one judges by the number who have respected His teachings.

All libraries contain an unusual number of books and a mass of journal literature concerning the art and science of teaching, and it would seem that enough has been said from the standpoint of teaching methods, except as one makes special application to specific subjects.

Student Responsibilities

The student begins with the problem "how to study," and any fair examination of the aid given to this problem reveals that

here is a much neglected field. If one examines the libraries for literature upon "the technic of study," he is sure to be greatly surprised at the limitations of printed material dealing with this subject. An examination of the curricula of most schools and colleges will show that no provision appears to be made for scientific directional help of students in the art and science pertaining to methods of study. Almost every teacher assumes, without any reason whatsoever, that assignment of work is the first essential in the program of education. It is true that variations have been made from simple assignments, but all these appear, as a rule, to fall short of adequate directions such as one might give a stranger travelling a mile in an unknown city.

One may come to his study with the thought, "Interest is the mother of attention; attention is the mother of memory; if one would develop and maintain memory, he must live with both its mother and grandmother."—(Joseph Cook.)

This, however, is not all that concerns the process of study, for interest must lag as a necessary control for hyper-attention, and lags that inevitably come must be overcome by tenacity. Lasting interest should become purposeful, yet this is not enough, for interest and purpose must have application to bring about accomplishment, and one accomplishment after another must be effected if one would know how to study.

The technic of "how to study" is clearly illustrated by the technic of getting a wife. One first becomes interested in a young lady, then he gives her attention of the kind that is acceptable in quality and quantity. Laging intervals of poetic reverie must be permitted or hypertension will produce untoward reaction. If the lady is a happy and complete companion, there is developed a lasting interest which duly becomes purposeful. Then an engagement follows, and ultimately its consummation in marriage. After marriage, there is the necessary technic of keeping a wife, and the secret is continuation of the technic of her acquirement.

From the Latin language comes the aphorism—*Repetitio est mater studiorum*, but it is a mistake to regard these words as a proper formula to answer the question "how to study." Repetition suggests an excellent practice to enable retention of a once-

learned bit of knowledge. Yet indiscriminating repetition may perpetuate errors as well as truths. L. R. Alderman, of the United States Bureau of Education, says, "Hearing others recite mistakes wastes time; and reciting what one knows also wastes time." Reflection upon this much-used technique for learning, as practiced too often by the inexperienced, causes one to wonder why experienced teachers and scholars permit this fault to live on and on.

The subject "Incentives to Study" came spontaneously to the attention of the Yale University student body a few years ago and it found expression in a survey which received publication in 1929 under the title, "Incentives to Study." The method utilized a questionnaire sent to each undergraduate, and the returned answers represented approximately 50 per cent of the total student body.

Reviewing the different summaries of this survey, one finds some interesting conclusions enumerated as follows:

1. Superior motivation placed Yale's poorer students in the lead in scholarship.

2. Definiteness and direction of purpose become incentives to study.

3. Excessive financial handicap may overcome motivation.

4. A teacher acting as a coach is unique in having a class painfully intent on getting what it goes after (not 60 per cent but 100 per cent, or all of it).

5. Concentration, rather than distribution, should be the curricular desideratum.

6. It is the student's belief that for honor men, the two final college years should be wholly tutorial; and these tutors should be the greatest teachers, instead of reserving such men for the large lecture courses.

E. Stanley Ryerson, of the University of Toronto, writes upon the subject, "The

Process of Study," and under the caption "Method of Study" suggests the following steps in studying any definite section of a subject:

1. Collection of Data.
2. Selection and Organization.
3. Assimilation.

Data may be collected by the student from any source available. Selection and organization involve judging and condemning so-called facts, then dividing ideas into groups. Deductive reasoning descends from the general to the particular, while inductive reasoning separates the relevant from the unimportant. Safety and skill in neglecting some and accepting other facts, may be developed by proceeding from the principal thoughts to the details. The central idea must be found and firmly gripped. Principal thoughts must be searched for and recalled frequently for valuation. The first sentence of each paragraph should give its topic and the last sentence ought to be its summary. All articles should progress by groups of facts.

Assimilation is getting nutriment into usable form to accomplish a purpose or purposes. As Dewey puts it, "A thought is not a thought unless it is one's own."

Impressions are created by the senses and we now have fifteen senses that are definitely recognized. Ideas are recalled by their relation or connections with other ideas.

Individuality must be realized, the power to work must be developed, and system should be cultivated. Concentration of attention is to be acquired to eliminate waste, and sound judgment of fact and statement values must be created.

Perhaps Anne Sullivan Macy and Helen Keller are two of the greatest living examples of solving the riddle "how to teach" and "how to learn."

Observations on Treatment of Chronic Arthritis With Vitamin D

Emil G. Vrtiak and Ross S. Lang, Chicago (*Journal A. M. A.*, April 4, 1936), treated twenty patients suffering from chronic atrophic arthritis with massive daily doses (from 150,000 to 250,000 U. S. P. units) of vitamin D. Two patients showed marked improvement, six moderate improvement, four slight improvement and eight no improvement. These results were not unlike those obtained with a number

of other methods of treatment or with methods used to produce only symptomatic relief. Undernourished and anemic patients showed the least improvement. Roentgenograms in five cases before and after treatment showed no change in the density of the bones. Nausea developed in all patients; in a few, frequency of urination and nocturia. This series of cases is too small for an estimate to be made of the value of vitamin D in the treatment of chronic arthritis but is sufficient to indicate a conservative attitude toward this form of treatment.

HUMAN BOTRYOMYCOSIS, WITH CASE REPORT

NOAH E. ARONSTAM, M.D.†

DETROIT, MICHIGAN

Human botryomycosis or granuloma pyogenicum is one of the rarest cutaneous affections extant. According to the consensus of opinion, this dermatosis constitutes about one case in every two thousand observed in dermatological practice.

The literature on this subject is comparatively meager; since the year 1904, the author was able to find approximately only eighteen references on this subject. Much discussion is prevalent as to the etiological factors in this infection. While some stoutly maintain that the causative agent is of fungous origin, others positively deny it, attributing it to a staphylococcus invasion, chiefly of the aureus group. Both views may perhaps be correct if we bear in mind mixed and superinfection. That saprophytes are occasionally responsible for the causation of botryomycosis hominis is elicited from the fact that a number of cases have been observed in butchers, cattle dealers, sausagemakers and attendants at abattoirs. The logical conclusion would therefore be, that all these factors, either singly or collectively, may be detected in the same or different individuals suffering from this dermatosis. At this juncture the importance of trauma as a predisposing factor must be stressed, which leaves a fertile soil for subsequent infection.

Textbooks and authors disagree as to the definition of the affection. They are loath to classify it definitely. Many agree that it is a neoplasm, a tumor composed of granulation tissue, and yet we are surprised to find it classified by others under diseases due to bacterial origin. The difficulty lies in not clearly differentiating between the clinical syndrome and the etiological factors, which beclouds the picture. The author, therefore, desires to reconcile these divergent views by offering the following definition: *Human Botryomycosis is a granuloma caused by a variety of organisms.*

Pathology.—If one studies the pathology of this dermatosis, he is strongly inclined to accept it as a neoplasm of the granulomatous type. The epidermal covering of the tumor is exceedingly thin, and there can be found no undulating line between it and the underlying structure. The body of the tumor is composed entirely of typical granulation tissue and dispersed

within the interstices of the cellular elements one may discover cocci, commonly of the staphylococcus group, with concomitant fungi showing distinct spores and mycelia, and occasionally, as in my own case, the bacillus enteritidis of cattle.

Symptomatology.—These lesions may appear anywhere. From the literature on the subject one may gather that they not only invade the integument, but also other structures, such as the canthi of the eye, external auditory canal, the marginal mucosa of the lips at their commissures, the labia majora, etc. If once the clinical picture of a fully developed granuloma is observed, one will not easily forget it. Springing from the normal skin at a height of 1 to 3 cm. there appears a circumscribed, oval or circular overgrowth of granulation tissue, about 3 to 5 cm. in circumference, covered with a glistening, ill-formed epithelial layer with a minute seropurulent exudate. The tumor is of a purplish or pink hue and imparts to the palpating finger a sensation of softness, not unlike the feel of a tomato. The granulation tissue, however, may be obscured by the thin pellicle of epithelium, which often gives rise to a wrong diagnosis. The lymphatic glands adjacent to the neoplasm may be enlarged and slightly painful. Occasionally there are one or several growths, as in my own case, and predominantly in those regions most accessible to infection from without, as the fingers, hands, face, and other areas mentioned above.

Diagnosis.—In this connection it must be remarked that these lesions are quite harmless. Yet they are very frequently wrongly diagnosed, especially so when there is a concomitant adenopathy. They resemble most anything. My case has been diagnosed

†Dr. Noah E. Aronstam graduated from the Michigan College of Medicine in 1898, and taught dermatology and urology in that institution for eight years. He is the author of a "Manual on Venereal Diseases" and a contributor on dermatological subjects to domestic and foreign medical journals.

as carcinoma on account of the co-existing cervical adenopathy. They simulate many lesions: sarcomata, mycosis fungoides, gummata, carcinomata, furunculosis and a host of other neoplasms and dermatoses. One guiding factor is their comparatively acute onset with rapid development and enlargement to the sizes mentioned above.

It must always be borne in mind that in all suspected cases one must look for simple granuloma at first, before arriving at a more formidable diagnosis. Their resemblance to granulation tissue is both apparent and striking. Serological tests will exclude lues and a biopsy will likewise eliminate malignancy. The clinical picture is so evident, however, that if once seen it is never forgotten.

The *prognosis* is good, provided one does not meddle too much or resort to radical measures, which brings us to the most important part of this article, viz., the therapy.

Treatment.—Ablation, excision, curettage, electro-coagulation, etc., should never be used before radiotherapy has been tried. Although a number of observers counsel removal either by excision or curettage with subsequent cauterization, we should never be too hasty. Roentgentherapy is a powerful remedy and very effective. One-half dermunit at a moderate distance, at five milliamperes, repeated once in five days, will amply suffice to eradicate these growths in a short time.

The above should be supplemented by the local application of a weak ointment of ammoniated mercury, 12.0 of the official ointment to 30.0 of petrolatum. Painting the lesions with some of the aniline dyes has proven efficacious. Solution of bismuth violet and Castellani's dyes are the ones commonly used. Softening these growths by keratolytic agents, such as salicylic acid collodion, hastens the process by softening and destroying the thin epithelial layer. Injections of staphylococcus combined vaccine (albus and aureus) will also materially aid us in our treatment. But above all, *roentgentherapy* is, in the author's opinion, the most effective measure whereby to achieve the desired result.

Case Report

T. L., male, aged forty-five, cattle and meat dealer. The family history was unimportant. The patient's past history was likewise of no significance, except for occasional colds. He consulted me, August 15, 1935, when the duration of the lesions was three weeks. One of these was located on the chin about two centimeters below the lower lip. There was a left cervical adenopathy with slight pain on pressure. A similar lesion was seen on the thumb of the left hand, which exuded a sero-purulent material; the temperature was 99°. The lesion on the chin was raised about one centimeter above the surface of the skin. It was a granulating, proliferating, exuberant mass with a serous exudate. The same characteristics were also noticeable on the thumb. Both lesions were of the same period of development. The dark field was negative; Kahn negative. A microscopic examination revealed occasional staphylococci, a large amount of cellular debris, pus cells and numerous diplococci. Occasionally bacilli enteritides of cattle were discernible, which the laboratory report suggested might be due to infected meat.

The diagnosis was human botryomycosis. The treatment consisted of roentgentherapy, one-third dermunit, followed by ultraviolet rays. Both lesions were painted with bismuth violet. Staphylococcus combined vaccine, 0.5, was injected. Five days later, the patient's condition was improved. The lesions were again exposed to ultraviolet rays. Two days later, marked improvement was noted. Roentgentherapy, one-half a unit, was followed by ultraviolet exposure, with a bismuth violet and Besredka dressing to the lesions.

By August 26, both lesions had almost retrogressed. They were exposed to the ultraviolet over a resorcin spray for seven minutes, followed by a Besredka and bismuth dressing. An ointment of ammoniated mercury, 12.0 (official ointment of the U. S. P.) to 30.0 of petrolatum, was prescribed. On August 29, another x-ray treatment was given, followed by ultraviolet. The lesions were painted with bismuth violet. In order to soften the still resistant lesion on the thumb, a salicylic acid collodion film was applied.

On September 3, I removed the collodion pellicle and curetted the lesion on the thumb, which was slightly more persistent than that on the chin. The latter lesion had entirely disappeared. On September 5, the lesion on the thumb had retrogressed. Bismuth violet was applied. Nine days later, both lesions had entirely disappeared and the patient was discharged. The duration of treatment was one month. The sites of old lesions are now at a level with the normal surface of the skin.

Summary

1. Botryomycosis hominis is a very rare dermatosis.
2. It is essentially a granuloma and perfectly harmless.
3. It simulates a variety of cutaneous lesions and neoplasms.
4. Its prognosis is absolutely good.
5. With proper treatment the results are always very gratifying.

622 Maccabees Bldg.

CORNIFICATION OF THE GLANS PENIS

Review of Literature—Case Report

OTTO VAN DER VELDE, M.D.†

HOLLAND, MICHIGAN

The occurrence of horn-like growths on various parts of the human body has excited interest from very early times. In 1930 a committee of the Royal Academy of Medicine of France³ collected seventy-one observations of horny growths of the skin. In 1867 Sir Erasmus Wilson¹⁷ collected ninety such cases, while a few years earlier in 1864 Lebert¹⁰ of Breslau, Germany, reported a collection of one hundred nine cases.

Horn-like keratoses occur both in man and beast. They are found more frequently in women than in men, and usually in the later years of life. Their location is most common about the head and face. They have been known to occur on the hands and feet, and in rare instances have been reported growing from the glans penis.

Among the seventy-one cases collected by the Royal Academy of France,³ three cases were reported arising on the glans penis. Of the ninety cases by Sir Erasmus Wilson,¹⁷ five were reported on the penis, and out of the one hundred nine cases by Lebert,¹⁰ six were on the penis. Lebert says that horny growths have also appeared on the penis of animals.

To the above recorded cases Hessberg⁸ has added one, Hebra⁷ one, Bergh¹ one, Pick¹⁴ one, Wilson¹⁷ one, Jewett⁹ one, Gould⁵ one, Chauffard² one, Ossola¹³ one, Hamonic⁶ one, Sicilia¹⁶ one, Mukai and Funabashi¹¹ two. Therefore, by the literature, it would seem that to date only twenty-five cases of cornification of the glans penis have been reported, and those mostly by foreign observers.

There is very little on this subject in recent medical literature. Therefore, I wish to report a case, the twenty-sixth of record and the second case so far reported in North America. The other case reported on this continent was that by Jewett⁹ in the *New York Medical Times* of 1854.

Report of Case

R. G. S., a white man, age eighty, first was observed by me on June 8, 1933. He had been referred by Dr. Henry Boss of Holland. The patient complained of pain in the penis and difficult micturition. He stated that the end of the penis was so sensitive that he could not bear to have his clothing in contact with the part, and he was observed walking about with one hand holding his clothing away from the genitals. He had had some trouble with the penis for twenty years but had never sought medical advice. However, about four years ago it began to grow worse and for the past year it had been almost unbearable at times. Recently it had

been very hard to urinate and now the stream was practically closed off. Otherwise he had always been well. His wife was living and well. They had never had any offspring. The patient vigorously denied all venereal infection.

Physical examination revealed a fairly well preserved white male weighing 170 pounds. The patient was rather fearful of all examination. He was a little cyanotic and quite dyspneic on the least exertion. The general physical examination revealed nothing of interest except that he probably had a myocardial degeneration. Special examination of his complaint revealed that he had a congenital phimosis, and he had never retracted the prepuce. The penis was a little swollen, and the distal portion was very sensitive to all manipulation. The meatus was surrounded by a hard dark brown horn-like deposit which entirely closed the outlet. There was a foul odor and some discharge coming from beneath the prepuce. No glands were palpable in the groin.

A diagnosis of probable malignancy was made and an amputation was advised. The latter was refused. Accordingly, a dorsal slit and biopsy was advised. The following day (June 9) under one per cent novocaine anesthesia, a dorsal slit was made. The prepuce was carefully separated from the glans. The latter appeared as a foul grayish white cartilaginous mass. Specimens were taken from separate areas for pathological section. It was then observed that the entire glans appeared to be separating from the spongy tissue, and carefully it was all removed, leaving a rough gray-white base of spongy tissue. A moist potassium permanganate dressing was applied and the patient returned to his bed. Convalescence was uneventful. The temperature never rose above the normal. Nine hours after operation the patient voided ten ounces with little difficulty and he was discharged (June 15) on his sixth post-operative day.

The pathological examination revealed a hyperplasia and cornification of the epithelium with no evidence of malignancy or syphilis.

At home, the patient was very comfortable for a month or more. However, signs of recurrence of the hyperplasia were soon observed. The entire area being exposed by the dorsal slit, drying naturally accompanied the hyperplasia—thereby producing a horn-like appearance of the entire glans. Gradually the meatus became occluded again and the act of micturition more difficult. The patient returned to the hospital a second time October 19 of the same year—four months and eleven days after the first operation. There was a well defined horn on the end of the penis now. The horny growth was of the same diameter as the penis and three-fourths inches in length.

Amputation of the penis was advised and the patient's consent readily obtained. The operation was

†Dr. Van Der Velde obtained an A.B. from Hope College and graduated from Rush Medical College, Chicago, in 1919. He spent two years as an interne. For the past eleven years he has been doing general surgery in Holland, Michigan. He is a member of the Holland Hospital Staff.

carried out the following day. Amputation was made one inch back of the glans, bringing a ventral flap up over the end of the stump and with the urethra coming out through a hole in the flap. The patient voided voluntarily early the next morning, and thereafter never again experienced any



Fig. 1.

difficulty in this respect. All horsehair sutures were removed on the fifth postoperative day and he was discharged to his home on this same date. His recovery was complete. He was relieved of all pain and discomfort, and lived a normal, happy life for a man of his years.

He died recently from a cardiac decompensation and pulmonary edema due to myocardial degeneration.

Comment

Horny growths of the glans penis is one of the more rare afflictions of man. As Chauffard,² in 1888, remarked, "It does not remain less true that by their singular location, by the deformity and the functional inconvenience which they incur, horns of the glans constitute for a patient one of the most painful illnesses and fortunately, as well, one of the most rare."

In Chauffard's case the horn had a length of 35 mm. and a thickness at the base of twenty mm. A. Richond-Debrus¹⁵ reported a case, in 1827, in which the horn had a length of 50 mm. on a base of 30 mm. Thus we observe that the growth, as it occurs, is not simply layers of horny scales as one might think, but instead a real horn with all its properties.

Early literature reveals that cases of long

standing gave a history of the horn-like growth being shed periodically, as a deer sheds its antlers. In the case of Richond-Debrus¹⁵ the patient had been in the habit of trimming the horn with his pocket knife as one might trim the large heavy ringworm nail on the toe.

Chauffard states, "Its consistency is exactly that of a horn with the base more friable. It is by this, we see, that the horn disintegrates itself in order to fall periodically and later to reproduce again." And as Richond-Debrus¹⁵ again says, "This horn had the form, color and consistency of an ordinary horn. It burned with a clear fire and the odor given off was the same." Thus, there is little doubt but that the growth is a true horn.

However, we cannot be satisfied with a simple description of so unique an affliction. Naturally we are led to dwell on the cause. Early observers, in 1827, suspected the origin as venereal, stating that it probably was due to the drying process of warts. Careful study of cases reported does not reveal a venereal infection in any one. Later observers propounded the theory of chronic irritation, as in cancer, but this fails in that the irritant is not apparent. Close observation and study reveals a striking similarity in all cases: congenital phimosis.

Congenital phimosis.—In every case one reads that there was a congenital phimosis, and that the prepuce never had been retracted. Consequently the hygiene, so necessary, was impossible. Secretions collected beneath the prepuce which in turn after years assumed a horny nature. It is assumed that this change takes place similar to that which a comedone undergoes when it becomes horn-like, as both secretions are of sebaceous origin.

Age.—The disease seldom occurs in the early decades of life. The case reported by Pick, in 1874, occurred in a young man of twenty-two years. All other cases occurred during or after the fifth decade in life.

Symptomatology.—The symptoms in all cases are strikingly similar—phimosis, pain and tenderness with ultimate urinary block. The duration of symptoms varied from four to twenty years. Metastases do not occur. When the neighboring lymph glands are involved there is ulceration and secondary infection. Some of the early observers thought that ulceration occurred primarily and the horn-like growth secondary. But

this review reveals that ulceration was only an occasional occurrence and that rather late in the disease.

Histology.—Gould⁵ has given the clearest histological picture to be found. He states that, histologically, horns may be divided into two classes: papillary and flat. The histological description of his case follows: "The horn shows the usual epidermic structure, the cells being flattened, nucleated and arranged in regular superposed layers. No enlarged papillæ enter the base of the growth, and the glands do not show any secondary epithelial deposits."

Treatment.—There is but one sane method of procedure when a case of horn on the glans penis presents itself to the physician. In all cases so far reported amputation was employed as a last resort. Always it was the ultimate outcome. Early surgeons used caustics and the "red hot iron" but always in the end the "bistoury." Richond-Debrus¹⁵ says, "Every few days I covered the member with a thick coating of poudre de rousselot wetted with saliva. I continued this practice for some time (after the preliminary circumcision) and finally reached the healthy part. I soon perceived, however, that the irritation induced by the caustic was causing the portions which appeared to be in good condition to become diseased, thus I lost in one way what I gained in another. I confined myself then to the use of the bistoury. As I found a portion which was bleaching and growing, I removed it as deeply as possible and favored the flowing of blood. By this practise I succeeded during the course of two months in obtaining an *almost* complete recovery."

As we read on we learn that the patient apparently felt as did his physician—that

he was almost well—for "he left for his village." After a few years the patient returned and Richond-Debrus says, "The glans again served as the base for an enormous horn," and amputation was advised as the only way out. To date, all cases, including my own, have had either a preliminary circumcision or a dorsal slit, followed by attempts at removal of the diseased portions, but always in the end by amputation of the penis. Therefore, it would seem wise to amputate at once, if permission for such can be obtained. It will save the patient much needless suffering and expense.

Conclusions

One of the most rare locations of a horn on the human body is that occurring on the glans penis.

Congenital phimosis is the one predisposing factor in their origin.

Amputation is the one and only successful method of treatment.

Bibliography

1. Bergh: *Archiv. f. Dermatologie in Syphilis*, 1873.
2. Chauffard: *Bull. et Mem. Soc. de Hosp. de Paris*, pp. 434-436, 1888.
3. Committee Report: *Memoires de l'Academie Royale de Medicine*, Juin, 1830.
4. Erichsen: *Science and Art of Surgery*, 8th Edit., Vol. I.
5. Gould: *Tr. Path. Soc., London*, 38:355-357, 1886-87.
6. Hamonic: *Rev. clin. d'Androl. et de Gynec.*, 5:257-264, 1899.
7. Hebra: *On Diseases of the Skin*. New Sydenham Soc., Vol. III.
8. Hessberg: *Beitrag zur Kenntniss der Hauthorner am Menschen u. Thieren*. Göttingen, 1868.
9. Jewett: *N. Y. Med. Times*, 1854.
10. Lebert: *Keratose*, Breslau, 1864.
11. Mukai, T., and Funabashi, T.: *Cutaneous horns of glans penis*. *Acta Dermat.*, 16:88, 1930.
12. Mukai, T., and Morimoto, S.: *Cutaneous horns of glans penis*. *Acta Dermat.*, 15:595, June, 1930.
13. Ossola: *Boll. de Soc. Med. Chir. di Pavia*, 24:127-131, 1910.
14. Pick: *Ibid.*, 1875.
15. Richond-Debrus, A.: *Corne developpee sur le gland*. *Archiv. gen. de Med.*, Paris, 15:218-222, 1827.
16. Sicilia: *Papillomas Cornuosi o Cuetruos de la Mucosa glands prepuclal*. *Med. iberica*, 6:132, 1919.
17. Wilson, Sir Erasmus: *Diseases of the Skin*, pp. 79, 799, 1867.

Hystero-graphy as an Aid in Diagnosis Of Abdominal Pregnancy

J. P. Greenhill, Chicago (*Journal A. M. A.*, Feb. 22, 1936), believes that when a diagnosis of abdominal pregnancy seems to be the correct one, injection of iodized oil into the uterus is not only a simple and relatively harmless procedure, but presents absolute evidence of the presence of a pregnancy outside the uterine cavity. A roentgenogram taken of an abdominal pregnancy without previous injection of an opaque substance into the uterus frequently shows a dead or a live fetus in an abnormal location but it does not prove that the fetus is outside the uterus. When a roentgenogram shows a fetus that has collapsed skull and/or other evidences of fetal

death and extra-uterine pregnancy is suspected, there is surely no harm in injecting iodized oil into the uterine cavity to decide whether or not the fetus is inside or outside the uterus. Likewise in cases in which a fetus is dead and repeated attempts to induce labor by medicinal and mechanical means, such as the introduction of gauze, and bougies, fail to bring about expulsion of the child, it is advisable to perform hystero-graphy. Occasionally one may be surprised to find an abdominal gestation. However, if the child is alive, together with doubt in the diagnosis, it might be dangerous to inject solutions into the uterus. A case of abdominal pregnancy, probably ovarian in origin, is reported in order to emphasize that a diagnosis of abdominal pregnancy can be made with certainty by injecting iodized oil into the uterine cavity.

DISEASES OF THE PROSTATE GLAND*

GERSHOM J. THOMPSON, M.D.

ROCHESTER, MINNESOTA

In the past five years there have been many articles written concerning diseases of the prostate gland which have set forth current opinions regarding this structure and dealt particularly with recent advances in the surgical management of patients suffering with an enlargement of the prostate gland causing urinary obstruction. It is not common knowledge, however, that medical treatment of prostatic disease has likewise been altered; the use of certain therapeutic measures which can be regarded as purely medical in type, or in some instances careful combinations of medical and surgical treatment, have enabled the urologist to accomplish results which less than a decade ago were impossible.

The more important diseases of the prostate gland can be classified as is indicated in Table I.

TABLE I. CLASSIFICATION OF DISEASES OF THE PROSTATE GLAND

- I. Inflammations
 - A. Acute or subacute
 - 1. Diffuse
 - 2. Abscess
 - B. Chronic
 - 1. Diffuse
 - 2. Abscess
 - 3. Retention cysts
 - 4. Median bar formation (with or without residual urine)
 - 5. Cicatricial atrophy (with or without residual urine)
- II. Hypertrophy
 - A. Benign
 - 1. Subcervical glandular hyperplasia
 - 2. Commissural glandular hyperplasia
 - 3. Trilobar glandular hyperplasia
 - B. Neoplastic
 - 1. Carcinoma
 - 2. Sarcoma
- III. Tuberculosis
 - A. Primary
 - B. Secondary
- IV. Calculi
 - A. Intraprostatic
 - B. Intracapsular

Inflammation

Contrary to common opinion, it is a fact that, in the majority of cases encountered, acute or subacute prostatitis is of non-venereal origin. The condition may be a sequel to acute infections elsewhere in the body, particularly infection in the upper part of the respiratory tract, the tonsils, teeth, or sinuses. At times it is not until the patient is quite sick and perhaps beginning to suffer with urinary symptoms that attention is

directed to disease existing in the prostate gland. In an occasional case the enlargement that results from the marked inflammatory reaction deep in the gland will cause obstruction to urination which will require catheterization, but it is as a rule best to avoid all urethral instrumentation. There is little if any benefit to be derived from urethral irrigations of any kind. The use of calcium gluconate in doses of 15 to 30 grains (1 to 2 gm.) orally, or 15 grains intramuscularly, each day accompanied by rest in bed, perhaps by hot rectal irrigations and by the usual measures designed to comfort the patient if fever is present, are usually all that is indicated. Careful palpation of the gland by rectum every other day, or even less frequently if it causes pain, will permit one to follow the course of the disease with intelligence and avoid neglect of an abscess that may localize in one of the lobes in an occasional case and sometimes require incision to hasten drainage.

In a number of instances I have opened subacute abscesses by transurethral incision, thus accomplishing under full vision wide drainage of pockets which at times are multilocular. This method is a distinct improvement over the old one of puncturing the gland with a urethral sound. The majority of prostatic abscesses will probably rupture themselves, into either the urethra or the rectum, but one should not delay too long for I have seen neglected cases in which the abscess burrowed along in the periprostatic fascia and resulted in extreme cachexia and in prolonged convalescence.

Chronic prostatitis is a disease regarded philosophically by some physicians as an affliction of all males beyond the age of

*From the Section on Urology, The Mayo Clinic, Rochester, Minnesota. Read before the Upper Peninsula Medical Society, Iron Mountain, Michigan, August 16, 1935.

adolescence. They therefore regard it as of little importance; but I can assure you that at times the recognition and proper treatment of the condition has brought great happiness to certain patients. Careful examination of any large series of cases will reveal the fact that, in the majority, the disease is not of urethral origin; it is rather the result of focal infection which is still present or has existed in the past elsewhere in the body, possibly in tonsils or teeth long since removed.

The elimination of chronic infection in the prostate gland is of importance at times even though urinary symptoms are absent. At The Mayo Clinic we have seen many cases of arthritis, myositis, iritis, neuritis, various types of dermatitis, and numerous other diseases of similar nature which improved miraculously when a neglected focus in the prostate gland was found and properly treated. I wish to emphasize the fact that in such cases one examination of the prostate gland is not sufficient to exclude it as a possible focus of disease. Various cicatricial changes can result in temporary occlusion of the ducts which ordinarily drain a wide area of the gland, and hence prostatic massage will express only a normal prostatic fluid on first examination. It is often only on repeated massage and microscopic study of the expressed secretion that a very marked focus of prostatic disease can be detected. In case of doubt it is well to perform urethroscopic examination, for not infrequently chronic abscess pockets located in aneurysmal-like dilations of the prostatic ducts will thus be detected. I have devised transurethral procedures for correcting these infected deformities within the gland and described in a recent article the treatment in sixty-five such cases.¹

Following the elimination of all other foci of infection which may be feeding the prostatic infection, it is in some cases possible to hasten the course of treatment by injection into the prostate gland of 10 to 15 c.c. of a 1 or 2 per cent solution of mercurochrome. This is done by passing a long needle through the perineum under guidance of a finger in the rectum; or, by use of a specially constructed needle, the solution can be injected through a urethroscope directly into the gland.

In certain cases of persistent chronic prostatitis the formation of a median bar

or a cicatricial collar deformity associated with prostatic atrophy will result in retention in the bladder of a quantity of residual urine. This usually becomes infected and, unless ordinary methods of treatment result in rapid elimination of this residual urine, transurethral operative procedures involving removal of the obstruction may be necessary before the prostatitis can be cured.

The old reliable methods of treatment, namely, massage and irrigation with weak antiseptic solutions, or the instillation of stronger antiseptics, are employed, of course, in the majority of cases. However, in such cases the knowledge gained by the study of a culture of the prostatic secretion is often worth while, for with it one can combine all that is known regarding the elimination of infection from the genito-urinary tract and hence speed recovery.

Hypertrophy of the Prostate Gland

Transurethral resection has greatly altered the outlook for patients suffering from any type of hypertrophy of the prostate gland that causes retention of urine. Particularly is this true in cases of benign enlargement among elderly men who are poor risks for prostatectomy. Fortunately, emergency operations for the relief of urinary obstruction are rarely if ever necessary. It is granted that suprapubic cystostomy may at times be urgent, but prostatectomy is always an elective procedure.

It is possible today to remove any type of prostatic obstruction by transurethral resection. It must be stressed, however, that until one has had considerable experience and developed a skillful technic, the method must be employed in a minority of the cases encountered. Suprapubic prostatectomy is a far safer procedure in the hands of the average surgeon. The promiscuous employment of transurethral resection by pseudo-urologists or by those with absolutely no previous cystoscopic training has brought disrepute to the method and marked suffering and mortality to many patients. In order to achieve a good result by transurethral methods it is absolutely necessary to be able to recognize all the different types of deformity as well as the variations of each type. If this ability is not possessed by the transurethral surgeon, he will overlook large masses of tissue projecting into various portions of the sphincteric area, which defeats

all the effort he has expended to establish a channel through the posterior portion of the prostate gland. Not only will his effort fail to relieve the obstruction, but the resulting congestion, necrosis, and sloughing will result in severe complications and perhaps death.

It is absolutely imperative that one become skilled in urethral instrumentation prior to attempting the operation, and expert indeed before applying the procedure to all types of prostatic enlargement. That an attempt has been made at the clinic to follow such a course is evidenced by the fact that in the eight years prior to January 1, 1935, 1,538 patients were subjected to prostatic resection and 1,197 to prostatectomy. During the past few years only a few patients have had the latter operation. In the 1,538 cases in which prostatic resection was performed there were thirteen deaths, a mortality of 0.8 per cent.

Very few cases of sarcoma of the prostate gland have been encountered at the clinic and those only in very young patients. Carcinoma, on the other hand, usually occurs late, when the expectancy of life is not great. As a general rule it has spread beyond all hope of permanent cure by any form of surgery before symptoms are produced. This is due to the fact that, as a rule, it arises in the posterior portion of the gland. Palliative transurethral resection, when urinary obstruction is present, seems to me the indicated operation in practically all cases. I am hoping that the high-voltage roentgen therapy now being advocated will provide an additional weapon against this dread disease.

Tuberculosis of the Prostate Gland

Tuberculosis is seldom, if ever, primary in the prostate gland. As a general rule it is associated with and secondary to involvement of bone or of the urinary tract. The external genitalia are practically always involved at some stage of the disease, and changes in these structures often assist the physician in making a differential diagnosis. The prostate gland is usually nodular and quite firm, though not as a rule as firm as is carcinoma. Coincidental involvement of the seminal vesicles in cases of tuberculosis, and the fact that the disease occurs almost exclusively in young individuals,

whereas carcinoma develops late in life, are other helpful points in arriving at a diagnosis.

Tuberculosis of the prostate gland rarely causes urinary symptoms. When symptoms are present, one will practically always find a coincidental renal tuberculosis. Elimination of the renal focus by nephrectomy is the first step in the treatment of the combined disease. If nephrectomy has been performed early enough and prior to the development of a small, cicatricial, contracted type of bladder, the urinary symptoms with which the patient suffered will, as a rule, gradually subside. Accompanying this improvement, the focus of tuberculous disease in the prostate gland and seminal vesicles will gradually resolve, hence radical surgical removal of these structures very seldom becomes necessary.

Prostatic Calculi

In the majority of instances, prostatic calculi apparently do not cause symptoms for they are discovered, as a rule, among patients who are subjected to roentgenographic study for other diseases.

Possibly the chief interest in their existence lies in the fact that they have often resulted in an erroneous diagnosis of carcinoma or tuberculosis. Routine roentgenograms should, therefore, be included in the study of any case in which there is a suspicion of either of these diseases. I have encountered several cases of carcinoma and stone occurring coincidentally, but such cases are very rare and, when stone is present, carcinoma can usually be assumed to be absent.

Stones may be single or multiple, and sometimes, although rarely, they attain huge size. Their chemical composition is quite surprising for, contrary to the opinion that they are probably formed from corpora amylacea or lecithin granules, they will be found to consist almost exclusively of calcium oxalate. I have removed nests of stones from deep in the gland, and, therefore, beyond all possibility of their having been formed in the kidney or bladder and of secondarily lodging in the prostate gland, and found them to be composed of calcium salts.

At times, because of the presence of calculi, it is not possible to treat a patient prop-

erly who is suffering from chronic prostatitis. The transurethral removal of the calculi, if they are embedded in the gland and cannot be palpated by rectum, is usually feasible. If, however, the stones are chiefly in the prostatic capsule and can be felt by rectum (crepitus can often be elicited), any surgical procedure which is deemed necessary should be done by the perineal route.

In conclusion I wish to say that every physician should include routine rectal examination in the study of every patient, particularly those suffering with complaints

of obscure origin; and he should keep in mind at all times the possibility of disease in the prostate gland as the cause of local or general symptoms. The early diagnosis of prostatic disease will enhance the possibilities of cure and in many instances prevent prolonged suffering. Numerous changes in methods of treatment in recent years offer much to patients afflicted with prostatic maladies.

Bibliography

1. Thompson, G. J., and Cook, E. N.: Chronic prostatitis and prostatic calculus. *Jour. Am. Med. Assn.*, 104:805-807, (March 9) 1935.

HYPERTENSION: ETIOLOGY AND EFFECTS

FRANK A. WEISER, M.D.†
DETROIT, MICHIGAN

When we speak of hypertension in clinical medicine we picture a disease state that has as its outstanding symptom a persistent elevation of systolic blood pressure above an arbitrarily accepted normal of somewhere between 140 and 160 mm. of mercury.

We think of a long chain of accompanying symptoms varying in character from patient to patient, failing to repeat itself regularly as a fixed pattern or failing to have any symptoms at all, discovery being accidental.

We think of it occurring in almost every constitutional type of human being: the tall thin, the short thin, the tall fat, the short fat, and the individual of average size and proportion, but we have the feeling that the short thick-chested red-faced individual is more apt to become a victim of hypertension than the other types. We are inclined to feel that persons of high emotional drive and tension are likely to appear eventually with a persistent abnormal blood pressure, but we know that hypertension does appear in the calm placid type, and that hypertension does not always appear in the highly emotional type.

We have learned to think of it as being more prevalent from the fourth decade on, and many of us have come to look upon it as a part of the degenerative diseases peculiar to senescence.

We have come to know the disease state by its effects on its three favorite vascular locations: the heart, the kidneys, and the brain. We also know that hypertension usually accompanies certain disease states of unrelated etiology, such as glomerulo-

nephritis, hyperthyroidism, lead poisoning, etc.

We think of it as an entity that has to be dealt with from the therapeutic standpoint, but in this instance we are somewhat at a loss for a method of approach since we are accustomed to reason from cause to control in most disease states, and in the case of hypertension the cause is, as yet, unknown. So little is factual that we are not yet sure which of its many symptoms can be used as a beacon signal to indicate the course of the disease, so usually we take as our guide the level of the systolic and diastolic blood pressure as an indicator.

Today the majority of investigators working on the problem of the etiology of hypertension accept the concept that blood pressure level is controlled by the arteriolar state. One school feels that increase in arteriolar tone results from spasm, and in support point out that hypertension is frequently present without demonstrable organic change in the vascular system, and that fluctuation of blood pressure can be accounted for on a basis of spasm. This school maintains that spasm eventually results in

†Dr. Weiser was graduated from the Wayne University College of Medicine (Detroit College of Medicine and Surgery) in 1920 and has the rank of Attending in Medicine at Grace Hospital and Instructor in Clinical Medicine, Wayne University College of Medicine, Assistant in Internal Medicine at Eloise Hospital and Infirmary.

arteriosclerosis. Another school of investigators feels that first the organic change in the vessel takes place, provoking spasm, and thus, hypertension. What factor or factors alter the arteriolar tone, however, is not known.

An attempt to demonstrate a circulating substance which has the capacity to alter the arteriolar state has long taken up the efforts of investigators.

Endocrine glands, on account of the observation that blood pressure is elevated by an excess of thyroid in hyperthyroidism and the isolation of a pressor fraction from the pituitary and adrenals, became the source of much investigative work. Earlier investigators claimed that hypertensives show an increase in epinephrine in the circulating blood, but this has not been substantiated, and in addition the fact that some tumors of the adrenals are accompanied by hypertension has permitted some to draw the conclusion that an explanation for increase in blood pressure will be found in the adrenal glands. We know, however, that many adrenal tumors are unaccompanied by rise in blood pressure.

The work of Cushing on basophilic adenoma of the pituitary, which is usually accompanied by elevation of blood pressure, has stimulated interest in assigning to the pituitary an etiologic rôle in hypertension.

The appearance of hypertension at the female menopause has caused others to feel that ovarian insufficiency may explain the origin of hypertension. The most evident objections are: the fact that the menopausal and hypertensive age is about the same, the fourth decade, and that during the menopausal period temporary vasomotor instability is not uncommon, disappearing as the menopause completes itself.

While it is true that in Graves' disease there is an elevation of systolic blood pressure, usually there is not a corresponding rise in diastolic pressure, and with the control of the primary disease the blood pressure falls unless a true essential hypertension complicates the hyperthyroidism.

Increase in chemical substances normally present in the circulating blood have come under the scrutiny of investigators.

Cholesterol, when present in abnormal amounts, has been designated as a cause in the production of high blood pressure. Many individuals with hypercholesteremia have no increase in pressure, and it has been found

in well controlled series that hypercholesteremia does not occur constantly in hypertension.

Recently the potassium-calcium ratio was thought to have a part in the production of hypertension, but again careful investigation has proved that no relationship exists and that disturbances in the potassium-calcium ratio are usually due to circulatory failure.

Various proteins have been given a causative role; peptone-like substances have been claimed to be increased in the circulating blood, but re-investigations have not substantiated the claim.

Many other circulating substances have been considered at one time or another. However, up to the present time, definite proof for any of them is lacking. Retention of normal dietary components has been under suspicion, as for instance, sodium chloride—careful studies have shown salt retention has no bearing on hypertension.

It was believed that excessive ingestion of proteins caused high blood pressure. Many who habitually have an excessive intake never develop hypertension. Stefansson totalled nine years of days on an all-meat diet without rise in pressure above normal.

Some have held that toxic elements are responsible factors in the elevation of blood pressure. Tobacco, alcohol, and various disease-produced toxins have been quite generally ruled out as definite irritants.

Stroke and angina families have long been known, and careful studies have been made to show that hypertension is transmitted as a dominant character. It is the feeling of some that the susceptibility to hypertension is transmitted and that environment controls its appearance.

The role of the nervous system in the regulation of blood pressure has long been suspected, and today the part played by the nervous system dominates research in hypertension. It is held that the height of the blood pressure is regulated largely by a vasomotor center situated in the medulla, and is influenced by reflex changes and by the hydrogen ion concentration of the blood. There are some subsidiary vasomotor centers in the lateral horns of the thoracic cord, fibres of which course through the sympathetic fibres to the viscera, which function when the medullary center is eliminated. The group of cells in the lateral

horns are not universally accepted as vasoconstrictor centers, but are considered to be under control of the medullary center.

Depressor, or vasodilator fibres, arise from the several neurons in the nervous system and considerable numbers leave by the parasympathetic system. In the regulation of blood pressure it is held that balance between the sympathetic-parasympathetic system maintains a normal level of pressure. Elevation of the blood pressure results when there is increased activity of the pressor reflexes of the sympathetic system or decreased activity of the depressor reflexes of the parasympathetic system. There is not a great deal of evidence that the depressor reflexes are a factor in production of hypertension. That increase in the pressor reflexes through the sympathetic nervous system is a factor in the production of hypertension is receiving more favorable support from several groups of investigators. But the reason for hyperactivity is as yet unknown.

Some workers have explained elevation of blood pressure on a basis of ischemia of the medulla, resulting from arteriosclerosis. The fact that severe cerebral arteriosclerosis is found without hypertension has cast doubt on the ischemic theory. It has been claimed by some that there are pressure controlling centers in the cortex. They cite as example the rise in blood pressure under emotional stress. While there are numerous statements in the literature of highly nervous temperament as a cause of high blood pressure, careful studies tend to disprove the emotional or psychic theory.

The old question of whether kidney disease causes hypertension, or hypertension causes kidney disease, has been argued pro and con through many pieces of research. It is possible to produce increase in blood pressure experimentally by excising sufficient kidney tissue, by damaging the kidneys with x-ray, and by gradual clamping of the renal arteries. Clinically, high blood pressure accompanies many varieties of kidney lesions, viz: mercury kidney-chronic, glomerulonephritis, polystic kidney, and hydronephrosis.

Essential hypertension, in which at the outset there is no evidence of renal damage, usually leads to a characteristic change in the arterioles of the kidney, sclerosis of the afferent vessels in the greater percentage of cases. Yet we do see hyperten-

sion without demonstrable chemical or anatomic involvement of the kidneys. The relationship between renal disease and hypertension is still a subject of controversy.

The histopathology of hypertension has been well studied. The heart characteristically manifests evidence of prolonged hypertension by left-sided hypertrophy, which may eventually complete the disease picture through dilation and fibrosis of the myocardium, ending in the clinical picture of progressive circulatory failure, cardiac asthma, eventually involving the conduction system and resulting in almost any type of arrhythmia, fibrillation, extrasystoles, tachycardias, pulsus alternans, Stokes-Adams syndrome.

In a large percentage of the cardiac cases sclerosis of the coronaries occurs, and is followed by exitus through the various types of clinical coronary patterns.

The kidneys of hypertension are recognized by involvement of the arterioles, in particular the afferent glomerular vessel. This arteriolosclerosis results in atrophy of the glomerulus from reduced blood supply to be followed by hyalinization and a consequent reduction in functioning glomerular units. Infarction and necrosis take place in the rapidly progressing types of hypertension. Clinically, various findings are recorded. Albumin and casts, then as renal units are choked off the specific gravity falls become fixed, polyuria supervenes and eventually uremia, due to renal failure, may end the disease picture.

The cerebral vessels in hypertension present the picture of sclerosis, resulting in the clinical picture of headaches, forgetfulness of recent events, dizziness, etc. There is some controversy as to how these symptoms are produced: whether the hypertension per se is responsible, or whether they may be explained on a basis of cerebral arteriosclerosis alone. Further progress of the disease ends in rupture of the vessel, producing hemorrhage into the surrounding brain tissue or narrowing of the vessel lumen, resulting in thrombosis, or, as held by some, spasm of the vessel with accompanying ischemia of the supplied area, bringing forth transient paralysis of various areas, often ending in death.

The mechanism of cerebral hemorrhage is a matter of controversy. Some maintain that the escape of blood takes place from a simple break in the vessel; some that escape

takes place through pre-existing miliary aneurisms in the vessel; others that many small vessels in a large area bleed simultaneously. Some hold that bleeding does not take place in normal brain tissue, but that the cerebral substance has undergone change due to the change in circulation brought on by the existing arteriosclerosis and the ischemia which follows repeated spasm of the cerebral vessels.

Progress of pathology in hypertension ordinarily takes place in all three vascular divisions concomitantly, although one division may progress more rapidly than the others, and thus, clinically, one system may hurry the functional degeneration of its more crippled partner, as for instance: cardiac failure may accelerate the appearance of an already imminent uremia, or cardiac failure, with its attendant drop in blood

pressure, may precipitate a cerebral thrombosis.

From this brief résumé we may conclude that as yet no single etiologic factor has been uncovered which will satisfactorily explain the cause of persistent increase in blood pressure, and that it is safe to reason that in some instances many of the factors named may combine with the inherited susceptibility of the individual to produce in him a persistent hypertension.

The effects of prolonged hypertension on the various tissues of the body have been well studied and are rather common knowledge. Careful and detailed postmortem studies on large series bring out the fact that three divisions of the vascular system normally bear the brunt of this disease, namely: the heart, the brain, and the kidneys.

UTERUS DIDELPHYS*

ALEXANDER W. SANDERS, M.D.†
DETROIT, MICHIGAN

The patient whose case is presented here has never been pregnant. Mrs. Y. G., who is thirty-nine years old, came in with a chief complaint of vaginal discharge. This began two years ago and at times necessitated wearing a pad. It is worse three to four days before onset and two days after cessation of the menstrual period. She began menstruating at sixteen years. For the first two years the periods were irregular, occurring every five to six weeks, lasting two days, being scanty and accompanied by pain in the lower abdomen. Since then, however, the periods have been regular, every four weeks, moderate in amount and of three to four days duration, but still accompanied by cramps and backache. The last period occurred two weeks before her present examination.

She has been married eleven years, but has never been pregnant. Her husband is living and well.

The patient is a fairly well nourished white woman, whose head, neck and chest revealed no abnormalities. No masses or organs were felt. There was some tenderness in the right lower quadrant.

Bimanual examination revealed two nulliparous marital vaginal openings. That to the left was the larger and admitted two fingers with ease. The vaginal tube became narrow as it approached the cervix. The latter was normal in size, freely movable; it was situated at, and fusing with the vaginal septum. The uterus was smaller than normal in size and retroverted. The adnexa could not be felt. The vaginal opening to the right was smaller and was separated from the one to the left by a thick septum which ran the full length of the vagina and admitted one finger only. The cervix here was smaller than on the left side, and had a polyp in it. This was verified by a speculum examination which showed a congested mucous membrane with a cervical polyp one inch long. On the left the mucous membrane was also congested but the cervix was normal. On the right side the uterus and adnexa could not be made out clearly.

An x-ray examination (Fig. 1) with lipiodol instillation through both cervixes showed:

1. A patent left fallopian tube.
2. Left uterus very small and rotated.
3. A second uterus on the right, also small.
4. Right tube closed to penetration by lipiodol.

Kossmaul is responsible for the belief that "all congenital anomalies of the genital tract are due to arrest of development or malformation in fetal life. Kossmaul classified these arrests of development according to the period of embryonic life in which they occur, and states that one of the most frequent anomalies is double uterus with its variations" (quoted by Campbell²). Campbell, in his classification, mentions the various types of duplicity of the uterus such as: Septate uterus, one, the cavity of which is divided into two parts by a partition; uterus bicornis, one with two horns; uterus bicornis with atresia, one in which one of the horns does not communicate with the uterine cavity; and uterus didelphys, one

*From the Gynecological Service of the North End Clinic. This study was made possible through the kind coöperation of Dr. Harry C. Saltzstein.

†Dr. Sanders was graduated from the University of Michigan in 1925. He was resident at Michael Reese Hospital, Chicago, 1926-27. He is now Associate Surgeon in Gynecology in the Department of Surgery at the North End Clinic, Detroit.

which has in addition to two separate uteri, two cervices and two vaginae. Our case is obviously one of uterus didelphys as she has two uteri, two cervices, and two vaginae. In all of these the degree of duplicity of the uterus and vagina depends upon the degree of failure of fusion of the müllerian ducts.

Eck believes that these malformations of the uterus are due in some cases, besides the lack of fusion of the müllerian ducts, to some constitutional or germinal defects. He states that this condition is most frequently found in the broadly built woman of stable temperament. These uterine anomalies have a negligible effect upon fertility (Campbell²), for wherever there is a functioning ovary and a patent fallopian tube leading to even a rudimentary uterus, fertilization and nidation may take place.

However, pregnancy in such double uteri always carries with it the possibility of very serious maternal and fetal consequences. According to Norman Miller,⁹ only 40 per cent of pregnancies with uterus didelphys as a complication, deliver spontaneously. Dystocia, abortions and premature deliveries are very common. These anomalies predispose to uterine inertia, hemorrhage and retention of placenta (Epstein and Goldberg⁵). According to Strassman, pregnancy in such a uterus is as dangerous as ectopic pregnancy.

W. A. Michael⁸ reports a pregnancy in a bicornuate uterus with child occupying one horn and the placental site a portion of both horns.

G. R. Cheatham⁴ reports a case of uterus didelphys in a woman thirty-four years old. She had a twin delivery, at which time the vaginal septum was incised for the delivery. This patient menstruated from both cervices. She became pregnant again on the right side while she continued to menstruate from the left side. She had a spontaneous delivery of a baby weighing 8 pounds 14 ounces.

Cervato and Levine³ report on the aid of lipiodol injection and x-ray in diagnosing double uterus.

The possible complications of a nonpregnant uterus didelphys are: dysmenorrhea, hematocolpos, hematometra and hematosalpinx. These conditions will result, if, in addition to the didelphys anomalies, there will be atresia of vaginal or cervical opening. Other complications are: dyspareunia and sterility.

In treating a patient with uterus didelphys, one must take into consideration the above complications. Thus, for a hematocolpos or hematometra, an incision and



Fig. 1. Uterosalpingography of patient in author's case. There is a patent fallopian tube. The left uterus is very small and rotated. A second uterus on the right side is also small. The right tube is closed to penetration with iodopax.

dilatation of the vaginal and cervical openings and the removal of the old blood will suffice. A dilatation of cervical os may help painful menstruation, but if there is a hematosalpinx present, Masson and Rientiels advise a salpingectomy; a pyosalpinx may develop, if treatment be limited to vaginal drainage alone. Dyspareunia may be relieved by removing the vaginal septum. For dystocia and sterility a few operations are described. Green and Miller⁶ describe a case of uterus didelphys in which the vaginal septum was removed at puberty. Later at laparotomy for appendicitis the right tube and ovary were removed. This, they state, limits pregnancy to one side and prevents the possibility of a double pregnancy with the danger of uterine rupture. In their case the patient became pregnant and had a spontaneous delivery of a normal living child.

Strassman, in 1896, described his operation for converting uterus didelphys into

a uterus with a single cavity, cervix and vagina. The technic (from Abraham's case report¹) is as follows: Through a laparotomy, a transverse incision is made through the top of the fundi of both uteri, then the septum between them is destroyed by the cautery in the anterior-posterior direction from above downwards to the level of the internal os. Then the opening into the uterus is closed in the sagittal line of the body, i.e., perpendicular to the original incision in the uteri. Laparotomy closed. Patient then put in stirrups. The whole septum vaginae is destroyed with the cautery extending to the vault of the vagina. Next, two sounds are introduced into the cervices, and are introduced far enough so that their points touch each other in the newly established single uterine cavity. Then, with the aid of the cautery again, the thick cervical septum is destroyed. Abraham did a cesarean section on a patient who, fifteen months before, had had this procedure performed on her, and there was no evidence of any scar on the uterine wall nor of any septum inside the uterine cavity. Uterus, cervix, and vagina had remained one single cavity.

In our case there is no dysmenorrhea, nor dyspareunia. The possibility of pregnancy and its accompanying complications were explained to her. Should she decide to have her malformation corrected an operation of the Strassman type may be undertaken.

However, Rhemann,¹⁰ in a recent article, states that he delivered seventy cases of uterus didelphys and encountered only two complicated deliveries. He, therefore, feels that such an extensive operation is indicated only in such patients where this anomaly is responsible for habitual abortions and premature labors.

References

1. Abraham, Ernst G.: *Zentralblatt f. Gynäk.*, 1931.
2. Campbell, Harvey: *Curtis' Obstetrics and Gynecology*, 1:1068.
3. Cervato and Isaac Levine: *New York State Med.*, (Aug. 1) 1931.
4. Cheatham, G. R.: *Am. Jour. Obst. & Gynec.*, 455-456, (March) 1934.
5. Epstein, H. J., and Goldberg, S. A.: *Am. Jour. Obst. and Gynec.*, pp. 342-347, (Sept.) 1929.
6. Green, B., and Miller, C. K.: *Am. Jour. Obst. and Gynec.* 30: 2, 281, (Aug.) 1935.
7. Masson, J. C., and Rieniets, J. H.: *Curtis' Obstetrics and Gynecology*, 3:669.
8. Michael, W. A.: *Am. Jour. Obst. and Gynec.*, 21:133-135, (Jan.) 1931.
9. Miller, N. F.: *Am. Jour. Obst. and Gynec.*, pp. 376-408, (April) 1922.
10. Rhemann, F.: *Monatsch. and Geburtsh. U. Gynäk.*, 97:1, (April) 1934.

9305 Grand River

CANCER SURVEY OF MICHIGAN*

Made by

FRANK LESLIE RECTOR, M.D.†

The qualifications of a roentgenologist are defined by the American Medical Association** as follows:

"The candidate shall be a graduate of a medical school that is approved by the Council on Medical Education and Hospitals and shall be licensed to practice medicine in the state in which his department is located. He shall also have had special training, such as is approved by the Council in radiology, roentgenology, or radium therapy at an acceptable school—preceptorship, hospital or clinic, department of radiology, roentgenology or radium therapy—for a period of at least three years. He must be a man of good standing in the medical profession, and particularly among those specializing in radiology. He shall either be on a full time basis or have definite hours of attendance at the department, such hours to be ample to ensure the element of medical consultation in every examination or treatment."

*Continued from April, 1936, issue.

†Field Representative, American Society for the Control of Cancer, New York, N. Y., Clarence Cook Little, Sc.D., Managing Director.

**Journal American Medical Association, vol. 102, p. 607, February 24, 1934.

In its Hospital Standardization Report for 1933, page 29, the American College of Surgeons lists the qualifications of a roentgenologist as follows:

"The director of the x-ray department must be a graduate physician, licensed to practice medicine, ethical, in good professional standing, and having had special training in radiology. He shall be responsible not only for general supervision of the department but for interpretation of all findings. Radiotherapy must also be under supervision of a skilled physician. . . . At all times the utmost coöperation between the radiologist and the medical staff is desirable. The former should not only be present at clinical conferences, but should also take an active part in the discussion since his contribution may be of distinct value in furthering the education of the staff."

In addition to the qualifications just cited, a new examining board for certifying specialists in radiology, The American Board of Radiology, recently has been formed. Its purpose is to examine and certify phy-

sicians as specialists in this field after they have passed a satisfactory examination by the board.

"Each applicant must establish to the satisfaction of the board that he is of high ethical standing, that he is a graduate of a medical school approved by the board, that he is a member of at least one of the societies that appoint members of the board, that he has had satisfactory experience in the practice of radiology, and that he is a physician duly licensed to practice medicine."*

The first examination of this board was held in 1934. In time a list of radiologists holding the board's certificate will be available for hospitals, medical organizations, and the public

"to assist in protecting the public against irresponsible and unqualified practitioners who profess to be specialists in radiology."*

Radium Therapist.—Radium is one of the newest and most powerful agents known to medical science and its possibilities for harm, when used by physicians without adequate training and experience, are so great that its application to human patients should be surrounded by all the safeguards medical science can suggest. Objections raised to the use of radium are based largely on poor results obtained at the hands of inexperienced users. Failure by the profession in general to use this agent is more to be commended than criticized, and only brings out in marked contrast the unsatisfactory results obtained by physicians who use radium occasionally without preparation or experience. As the proper use of radium and radon requires a high degree of skill and training and a special knowledge of their effects on human tissue, the patient's welfare usually is better safeguarded by accepted surgical procedures than by irradiation at the hands of untrained physicians.

The use of rented radium by untrained physicians is a procedure for which no commendation can be offered. More often than not the patient will receive little lasting benefit from such treatment. The mere possession or use of radium is no more a criterion of competency in that field than would the possession of surgical instruments indicate competence as a surgeon.

Radiotherapy has long been used in Sweden under direction of Dr. Gösta Fors-

sell of the Radiumhemmet. In discussing its use, Dr. Forssell* says:

"In Sweden radium has never been lent for use by doctors who lacked special training in radiotherapy. When radium is to be employed in conjunction with operations in the surgical departments, a trained radiologist is always present. The combined surgical-radiological treatment is mapped out after consultation between the surgeon and the radiologist. The radiological pre-operative and post-operative treatment is given by the radiologist."

Medical publications can render a distinct service in the control of this problem by refusing advertisements of organizations renting radium indiscriminately. As the public becomes better informed regarding the necessity for adequate experience on the part of those offering irradiation therapy, and as the medical profession more fully realizes the more intricate problems surrounding this form of therapy, present abuses will be eliminated and an improved service rendered to cancer patients. So far as known no hospital or cancer institute in this country owning radium or producing radon will permit its use by other than qualified members of its own staff.

In the province of Saskatchewan, Canada, radium has been made available by legislative appropriation. It is controlled by a commission of three physicians and can be used only under the personal direction of the radiotherapist member of the commission. Physicians must bring or refer their cancer patients to the clinics maintained by the commission. Regulations governing the care of radium supplies issued by the Saskatchewan Cancer Commission provide that

"17. Where a medical practitioner desires the use of radiotherapy on a patient, the equipment of the Commission may be made available under the following conditions: the case shall be submitted to the consultative diagnostic clinic and, (a) its recommendations for the use of radiotherapy obtained; (b) the radium to be applied under the direction of the radiotherapist of the clinic; (c) the fees for the use of the radium to be paid, as prescribed by the Commission."

The educational qualifications of a radium therapist are the same as those of a roentgenologist, see page 328, and the examination of the American Board of Radiology applies to both radium therapists and roentgenologists.

Social Service.—Social service work is of primary importance in an acceptable cancer service. It is most important that all cancer

*Journal American Medical Association, v. 102, p. 642, February 24, 1934.

*American Journal of Cancer, v. 20, No. 4, p. 872, April, 1934.

patients be followed carefully over a long period subsequent to their treatment. At the present time too little is known about the health of cancer patients after treatment and, as a knowledge of their subsequent condition is the only practical criterion of the effectiveness of treatment, it is essential that facilities be provided for obtaining periodic information regarding such cases.

This work can best be done by well trained and experienced medical social workers who will not only relieve the physician of a responsibility which at times is most difficult to discharge without seeming to be too solicitous about his patients, but will assist in gathering data most necessary to a better understanding of methods of diagnosis and treatment of cancer patients.

The functions of a social worker in a tumor service may be summarized as follows:

1. To the patient and his family make clear just what is involved in the plan of treatment and assist when needed in carrying out the plan. Study social and economic problems involved and suggest a plan for their solution. Stimulate the morale of patients and encourage them to continue under observation and treatment.

2. Inform the physician in charge of the social and economic problems involved and personality factors to be considered in treating the case.

3. To the community, the policies and procedures of the cancer service can be presented in an understanding manner as can also needs of patients being cared for. Relationship of the community to the entire cancer problem can be exemplified at times by a case involving the attention of various medical and social agencies.

In the absence of medically trained social workers, public health nurses or visiting nurses can often obtain necessary information regarding cancer patients. In the course of their daily work they may discover information of value to physicians and hospitals interested in these cases.

Some authorities say no attempt should be made to organize a special tumor service until trained social workers are available. In the Report of the Royal Commission on the Use of Radium and X-rays in the Treatment of the Sick of the Province of Ontario, it is stated on page 102:

"That in the successful treatment and control of cancer, it is essential that every patient be closely followed up so that he or she may be induced to return for observation at regular intervals. For this purpose every centre should possess an active Social Service. The duties of a Social Service should include not only the keeping track of patients and bringing them to the treatment centre, but also the supervision of home conditions, and the securing for such cases of moral, and, if required, financial aid."

Again, on page 106 of this same report the Commission recommends

"That, in connexion with every centre, the most careful and exact records of cases be kept, and that a Social Service be maintained for the purpose of 'following up' all patients."

Records.—In addition to the professional facilities suggested for specialized tumor services in general hospitals, adequate provision should be made for recording not only the regular data found in all well kept hospital records, but additional information regarding cancer. To be of the most value, such records should be comparable for all hospitals so that an increasing volume of accurate information about cancer gradually will develop. The American College of Surgeons has formulated a cancer record that it will place at the disposal of any hospital. This blank offers a uniform method of record keeping and may well form the basis of records adopted in an organized tumor service.

The record clerk might well act as clinic clerk while patients are being examined. By so doing an insight can be obtained of the patient's problem which should result in a more comprehensive recording of essential data bearing on the case. The record department should work in close coöperation with the social service department in coördinating and analyzing information for the clinic staff and attending physicians.

Hospital Coöperation.—While the entire resources of the hospital will be called on to contribute to the welfare of cancer patients, the following departments are especially concerned with this problem:

Administration.

Interne—History taking and physical examination.

Laboratory—Diagnosis.

Surgery—Diagnosis and operation.

Medicine—Diagnosis and indicated medical treatment.

Radiology—Diagnosis and treatment.

Radium therapy—Treatment.

Nursing—Care of patient.

Social service—Follow-up on patients.

Records.

Staff conference—Discussion of case for benefit of all concerned.

The accompanying chart indicates some of the functions and relationships of hospital departments and other elements in an organized tumor service. The ultimate type of organization will depend on the needs of each local group.

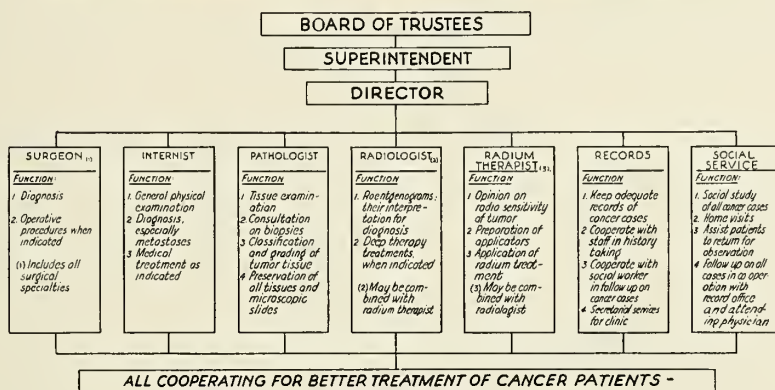
Cancer Prevention and Control in Michigan

The following facts bearing on the cancer problem in Michigan have been developed in this survey:

While the general death rate in the State

Battle Creek, Bay City, Detroit, Flint, Grand Rapids, Kalamazoo, Muskegon and Saginaw. In Lansing a nonmedical pathologist, a member of the Michigan Pathological Society, maintains a laboratory which serves hospitals in that vicinity.

CHART OF ORGANIZATION FOR CANCER SERVICE IN GENERAL HOSPITALS



is declining, in keeping with other sections of the United States, the cancer death rate is rising. From 1914 to 1933 cancer deaths increased 50 per cent and the death rate 26.6 per cent.

At the time of this survey forty-four counties in Michigan, containing 12 per cent of the population and 10 per cent of the physicians, were without hospitals of twenty-five beds or more. In 1933 15 per cent of the cancer deaths were reported from these counties. Residents of some of these counties have access to hospitals in larger population centers, but others are remotely situated in this regard.

Among the 4,205 cancer patients hospitalized during 1933 in general hospitals of twenty-five beds and over, there were 835 deaths, of which 357, or 42.8 per cent, came to autopsy.

All general hospitals in Michigan admit cancer patients.

Tissue Examination.—Forty-four hospitals visited in this survey are without laboratory facilities for tissue examination. Thirty-seven of these, however, send all of their tissues and three submit selected tissues to recognized pathologists for examination. Physician pathologists, devoting all or a major portion of their time to laboratory work, were found in Ann Arbor,

While the practice of submitting all tissues to examination is carried out by a large percentage of the hospitals in Michigan, there would seem to be little excuse for any hospital in the State to neglect this service of such obvious value to the physician and patient. If all tissues from all hospitals were examined, undoubtedly some diagnoses and treatments would be changed to the benefit of the patient.

With full appreciation of the problems confronting the hospitals of the State, it is felt that no commendation can be offered those hospitals and surgeons who summarily discard removed tissues without examination by a competent pathologist. In such cases the interest of the patient might be better served if indicated surgical procedures were deferred, barring emergencies, until the patient could reach an institution where adequate laboratory facilities are available. As an alternative, arrangements might be required for examination of all removed tissues in acceptable laboratories. Were such facilities available to all hospitals and physicians of the state, many practitioners in rural communities without hospital facilities would be able to render a more adequate service to their patients.

Precedents for such a requirement are found in the Province of Alberta, Canada,

and in the State of New York. The Alberta law provides that

"Tissues or sections of tissues removed at operations shall immediately be set aside by the surgeon operating, and shall be forwarded by the superintendent to the Provincial Laboratory for examination, or to a laboratory approved of by the Provincial Laboratory, together with a short statement giving the findings at the operation."

According to the Deputy Minister of Health for Alberta, Dr. M. R. Bow,* operation of this law has resulted in a marked improvement in surgical work in smaller hospitals of that Province. During 1931, 4,278 such specimens were examined by the laboratory staffs.

The regulations of the Sanitary Code of the New York State Department of Health read as follows:

"Regulation 7. *Tissue removed at operation or necropsy to be examined.* Representative specimens, or sections for microscopic examination, of tissue removed at operation or at necropsy which require laboratory examination as an aid in the diagnosis, prevention, or treatment of disease or to determine the cause of death shall be submitted to an approved laboratory, to the division of laboratories and research, Albany or New York City, or to the state institute for the study of malignant diseases, Buffalo."

In New York, clinical pathologists wishing to examine tumor tissues must take an examination to determine their fitness for this work. An essential part of this examination is the identification of a series of microscopic tissue slides representing various types of malignant growth.

It should be pointed out that in both Alberta and New York, legal requirements for tissue examination give properly qualified pathologists in private practice opportunity to make tumor tissue examinations, but to do so they must give evidence of competency in this field.

It is a matter of interest that the recognition of the need for more competence in the field of tumor tissue diagnosis was one of the determining factors in the organization of the Michigan Pathological Society, and one of the requirements for membership in this society is the identification of a series of tissue slides, many of which are of tumor tissue. Because of this attitude on the part of the pathologists of Michigan, a high degree of ability is brought to bear on the

interpretation of tumor tissue in that State.

The work of the Michigan Pathological Society should serve as an example for other professional groups interested in the diagnosis and treatment of malignant disease. To become more proficient, surgeons and radiologists might meet regularly with the pathologists for study of tumor tissues along lines followed by the American Association for the Study of Neoplastic Diseases. The joint annual meeting of the pathologists and radiologists of Michigan might well be broadened to include surgeons and other specialists concerned with the field of malignancy. Such meetings might be held from two to four times annually. By this means those concerned with the cancer patient would have the advantage of consultation and discussion of a much larger number of cases than any physician could hope to see over a long period in his own practice.

The situation in the upper peninsula of Michigan regarding facilities for the examination of surgical tissues should be of concern to the medical organizations and hospitals of that region. With a population of more than 320,000, with nine hospitals of 25 beds or more, and several others of less capacity, and with a cancer population of at least 1,000, it is unfortunate that there are no laboratory facilities or pathologists available in this territory. Although the hospitals are widely separated and transportation between many of them is not easy, especially in winter, it is suggested that some provision be made for the examination of tissues, at least from the larger hospitals. For instance, tissues from Hancock to Ann Arbor must travel a distance of 800 miles.

Biopsy.—Biopsy on all accessible tumors is becoming a more universal practice in dealing with cancer patients and is increasingly necessary as more patients come under observation with early lesions that make the clinical diagnosis difficult. Those physicians who refuse to have biopsies on suspected malignant lesions and place their clinical judgment against the more precise microscopic findings, are subjecting some of their patients to an unnecessary risk. The biopsy is no longer considered dangerous when performed under proper safeguards and its use represents an appreciation of the value of modern diagnostic procedures.

(To be continued in June issue)

*Personal communication.

President's Page

LET YOUR LIGHT SO SHINE

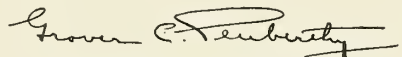
"The medical profession has too long lived within itself; the very atmosphere of evasiveness with which the profession has so long been surrounded has proved to be a very embarrassing thing; it is only in recent years that we have been going before the public with our confidences. It is true that we have made great strides in this direction. Today we have strong allies in many quarters that were formerly closed to us, but there is yet a vast amount of work to do."

OUR neighbor, the Indiana State Medical Society, is the author of this observation. It long since recognized the danger of living too much to oneself despite the delights. The Indiana State Medical Society has developed a progressive program of public information which for years has been working efficiently and is making strong friends for the united profession of the state as well as for the individual doctors. The advantages of the family physician and the precious confidential relationship between him and his patient are presented to the people, who hear the message and act on the good advice. Our neighbor's work deserves emulation!

A bureau of information has just been created by the Michigan State Medical Society. The idea was approved by your officers last month and given to the very active Public Relations Committee to develop. Great good to the people and to the professions of medicine, dentistry, and nursing will result from the constant activities of this new department of the State Society. Its work throughout Michigan will eventually necessitate the creation in all county medical societies of speakers' bureaus, which will bring the physician into closer contact with groups of laymen.

The public desires information about Medicine, its history, accomplishments, activities as well as its problems. The whole world is waiting to hear the truth about Medicine and to join hands with the doctor in his fight for good medical care and the maintenance of high health standards. The new bureau of information will do its part and do it well, every day in the year. The more important phase of the work, however, the actual personal contact with the people, is your responsibility. You must do your part to inform the public on medical matters of scientific or social import. It must be done in your office, among your social contacts, on the rostrum, and over the radio.

To gain the public's confidence, we must first take the public into our confidence. We have lived too long within ourselves. Beginning today, organized medicine in Michigan ceases to be esoteric. It brings its important message to the public and to the press.



President of the Michigan
State Medical Society

THE JOURNAL

OF THE

Michigan State Medical Society

PUBLICATION COMMITTEE

A. S. BRUNK, M.D., Chairman.....Detroit
 HOWARD H. CUMMINGS, M.D.....Ann Arbor
 J. EARL MCINTYRE, M.D.....Lansing

Editor

J. H. DEMPSTER, M.A., M.D.
 5761 Stanton Avenue, Detroit, Michigan

Medical Secretary

C. T. EKELEND, M.D.
 35 W. Huron Street, Pontiac, Michigan

Business Manager

Wm. J. BURNS, LL.B.
 2642 University Avenue, St. Paul, Minnesota
 or
 2020 Olds Tower, Lansing, Michigan

MAY, 1936

*"Every man owes some of his time to the up-
 building of the profession to which he belongs."*

—THEODORE ROOSEVELT.

EDITORIAL

CORPORATIONS MUST NOT PRACTICE MEDICINE

AN action was instituted in the Superior Court of Cook County, Illinois, by the attorney-general of the state calling the United Medical Service, Inc., of Chicago, to show by what right or authority it was practising medicine. In March, 1935, a judgment was entered ousting the corporation from the franchise occupation and business of engaging in the diagnosis and treatment of human ailments. Following this the corporation appealed to the Supreme Court of Illinois. During the interval, the judgment of the Superior Court was suspended and the corporation continued its medical practice.

The Supreme Court of the state rendered a decision affirming the judgment of the lower court on February 14, 1936. The decision of the Supreme Court of Illinois is given at length. It embodies thirteen closely written typewritten pages and is printed in full in the March number of the *Illinois State Medical Journal*.

Apropos of the subject a similar decision was made by the Supreme Court of the state of California in and for the city and county of San Francisco in the case of the people of the state of California ex

rel. State Board of Medical Examiners as plaintiff versus Pacific Health Corporation, Inc., defendant. In giving his decision, the judge of the Superior Court, among other things, said:

"This case, in my opinion, is ruled by *People vs. Merchants Protective Corporation*, 189 Cal. 531. There is not a single ground, so far as I can see, upon which it can be distinguished; nor any reason found in that opinion which cannot, with equal force, be urged with respect to the case at bar. Substitute 'doctor' for 'lawyer' or 'attorney,' and 'patient' for 'client,' and you have the instant case. At page 539 it is said: 'The attorney in such a case owes his first allegiance to his immediate employer, the corporation, and owes, at most, but an incidental, secondary and divided loyalty to the clientele of the corporation.' The same is true of the doctor-corporation-patient-relationship here in question.

"The law singles out members of the medical and legal professions and treats them differently from members of other professions. This is well instanced in the provisions of Sec. 1881, C.C.P., which codify, broadly speaking, the familiar rules of law respecting confidential communications. 'There are particular relations,' says that section, 'in which it is the policy of the law to encourage confidence and to preserve it inviolate; therefore, a person cannot be examined as a witness,' etc., etc. Then follow the privileged persons, and of all the learned professions (other than the ministry) the only ones so privileged are the medical and legal professions. Thus, as far as privilege goes, they are put on a par. It is the highly confidential relationship which seems to be the controlling factor."

Both law and medicine involve confidential relations between attorney and client on one hand, and physician and patient, on the other, that are unique. These peculiar relations, it appears, do not apply to other professions, such as teaching, architecture, or engineering.

KEEP ALL MEDICAL OPERATIONS WITHIN THE PROFESSION

THERE has been a disposition for lay persons or lay groups to invade the practice of medicine by offering diagnostic service by circularizing the medical profession with cut rate fees for x-ray and clinical laboratory examinations. These may be technicians who have been discharged by physicians, or who have imagined they would have a more lucrative field if they went on their own. In order to obtain a certificate of qualification from the board as certified x-ray technician the diploma is granted, among other things, only on signing a declaration that the technician will work in connection with a qualified roentgenologist and not establish an independent office or laboratory.

This menace, however, appears to be widespread, for in the *American Medical*

Association Bulletin for February appear resolutions to be submitted to the House of Delegates of the A. M. A. at the Kansas City session in May. These resolutions are from the California Medical Association.

WHEREAS, Certain organized lay groups in this country are endeavoring to arrange for the provision of diagnostic medical service along with and as part of hospital services; and

WHEREAS, The provision of such diagnostic medical service will inevitably foster fundamental changes in the practice of medicine; and

WHEREAS, Such changes in the practice of medicine may well result in deterioration of our present medical standards and especially in deterioration in the quality of medical care furnished to hospital patients; now, therefore, be it

RESOLVED, That it is the official policy of the House of Delegates of the American Medical Association that it *disapproves of the division of any branch of medicine into technical and professional portions.* (Italics ours.)

The employment of non-supervised x-ray and clinical laboratories tends to deteriorate the quality of medical service, inasmuch as such work includes what are known as laboratory specialties which involve not only the technical work with patients, but the interpretation of the findings, as well, which has come to be a very highly specialized field in itself.

There are a few certified clinical laboratories in this state operated by technicians with non-medical training. These might with advantage be under the supervision of physicians skilled in the interpretation of the various pathological findings.

There are no certified nor reputable x-ray laboratories not operated and controlled by competent physicians. All those anonymous institutions, one or two without a declared local habitation or a name, are beyond the control as well as the knowledge of the medical profession. This JOURNAL publishes each year a list of clinical and pathological laboratories, certified by the Michigan State Board of Health.

Anesthetics are often left to nurses. This is distinctly an operation for a medically trained person. It calls not only for skill but for an unusual knowledge of the heart and circulation as well as choice of agent. Many physicians, if operations were to be performed on themselves, might not have much choice among surgeons, most of whom are technically and by experience and training qualified. They would, however, have considerable concern regarding the skill and qualification of the anesthetist.

The medical profession will act in the interest of the patient if they will direct every

effort towards preventing the "division of any branch of medicine into technical and professional portions," to quote from the above resolutions.

A SUGGESTION FOR FOUNDATIONS

IN the April number of this JOURNAL the fact was proclaimed that the W. K. Kellogg Foundation had invited 350 physicians of seven Michigan Counties for a two weeks post-graduate course at the Washington University School of Medicine at St. Louis. Those attending had an opportunity for a practical course adapted to every need of general practice. This JOURNAL had not been unmindful of the good work being carried on in the state, by the W. K. Kellogg Foundation, which was confined to a limited number of the counties of this state. The work carried on for a number of years has been both thorough and practical.

The W. K. Kellogg Foundation has set a noble example to other foundations with huge sums of money at their disposal. If the urge is to improve the quality of medical care, one of the best ways of going about it to improve the doctor. Along with this might be undertaken a campaign of informing the people at large where adequate medical care might be obtained.

The Department of Post-Graduate Medicine of the state university and the Michigan State Medical Society have offered short intensive courses in the various departments of medicine and surgery and have brought post-graduate facilities almost to the office of the physician. They welcome the work of the Kellogg Foundation along similar lines. There cannot be too much of it. Other foundations would do well to emulate the example here shown.

MEDICAL CASE HISTORIES

THE writing of case histories is one of the most neglected matters in the recording of medical data. We have received many contributions from medical writers which required little or no editorial correction until we came to an included history of an interesting case, when there was a distinct drop in the writer's style. Many case histories are turned in as notes intelligible only to the writer. When the case histories are re-

turned for rewriting they come back to the editor very satisfactory.

We have on numerous occasions advised against a so-called telegraphic style of writing. Abbreviations should not be employed or, at most, limited to those which are universally understood. Sentences should be complete. Do not leave either the subject or the predicate to be implied by the reader. Another important observation is that of time sequence. Rather than giving dates, it would be preferable to write, so many days following operation, and so on. Probably the best advice would be to aim at clearness of statement, having the reader always in mind.

TUBERCULOSIS EARLY DIAGNOSIS

THE annual "Early Diagnosis Campaign" to attract attention to the early recognition of tuberculosis is on, and while this effort should be a year 'round activity still it is characteristic of our time to set aside special seasons of the year for drives for various worthy objects. It is well, therefore, that the public be instructed as to the efficient means that medical science has for the detection of the earliest changes brought about by this disease. It is not amiss either that the medical profession renew its interest from time to time in what has been an age long battle but which as Dublin has pointed out in his recent book, "Length of Life," is now getting to a stage where the relegation of tuberculosis to a minor rôle as a disease is in sight. Indeed, he shows that lowering of the mortality rate of tuberculosis alone between 1920 and 1930 added almost a year to the average length of life of the people of this country.

The key to the situation is still early diagnosis, both because the individual sufferer may then have a good chance of recovery and, what is just as important, may not develop into a spreader of the infection among his fellows.

The tuberculin test for the recognition of the presence of infection with the tubercle bacillus and the x-ray to determine whether the infection if present has become severe enough to be actually disease are two procedures the physician is familiar with as his chief aids in the diagnosis of early tuberculosis. More extensive use of these procedures will correct materially the situation

that still exists, namely, that in our present diagnoses almost eighty per cent of those discovered to have pulmonary tuberculosis have gone beyond the early or minimal stage of the disease when first found. If more attention is paid to the careful examination of the contacts of known cases of tuberculosis, not just once but periodically, it has been demonstrated that a far larger percentage of cases in the early stage may be found.

The medical profession has contributed largely to the conquest of tuberculosis, and with the intelligent coöperation of the public the battle may now enter its final stages.

ALBERT MOORE BARRETT

THE recent untimely passing of Dr. Albert Moore Barrett signifies much more than the loss of an executive officer of a state institution. His death, in the midst of a full and active functioning, marks rather the passing of a unique, heroic figure, both as a scientist and a man, quite irreplaceable and leaving an imperishable and significant impression upon the broad life front. He belonged not merely to the University and the State, but, in the widest sense of the term, to his time, to the existence of which he was a part and to which he contributed so richly.

He was the organizer and administrator of the first Psychopathic Hospital in the United States, established at Ann Arbor in 1906, a university-state unit designed for the intensive, modern scientific study and treatment of psychopathologic conditions, mild and borderline as well as those of major or psychotic type. The founding of this institution marked a signal, almost revolutionary, step forward and set up an important beacon for aftercoming progressive developments. Through the opportunity of this position and the enthusiasm, energy and sagacity which Dr. Barrett gave to the work, he early became one of a small but distinguished company of pioneers who, starting about the turn of the century and from rudimentary beginnings, did much to make psychiatry a truly and significantly functional branch of medicine, available to the service of all of society and not sequestered, as had been, behind asylum walls.

As a teacher, with his solid training and experience, his rugged sincerity and honest scientific spirit, his balance and brilliance of

thought, inquiring mind and warm unaffected humanness, Dr. Barrett was most effective and through the years influenced, greatly and enduringly, a host of students and workers in the field.

As a man, cultured and sentient, natively shrewd and vital, yet simple, genial and friendly, with much innate charm and a delightful quizzicality and humor, he endeared himself to an ever widening circle. Through these qualities, further, his possibilities and effectiveness as an administrator, scientist and teacher were naturally much enhanced.

In Dr. Barrett's going, we suffer without a doubt the loss of a real personage, a man invested with elements of true greatness. More than this, his death may be taken to symbolize the closing of an important chapter in medicine, at the beginning of which psychiatry was, in main, an obscure, essentially unquickened and groping empiricism, in many ways medieval in its ideology and practice, and at the end emerges a lustily growing, modern scientific endeavor, adding meaningfully and broadeningly to medicine and the welfare of mankind.

THE JOURNAL OF THE A. M. A.

IN the report of the Board of Trustees of the American Medical Association published in the *Journal* of the association for April 4, the number of physicians in Michigan is given as 5,678; of these, 3,201 subscribe to the *Journal of the American Medical Association*, or 56 per cent of the total members in the state. This percentage is not as large as it should be. However, the number of members of the Michigan State Medical Society is a little over 3,500. We presume the great majority of our members also subscribe for the National Journal. Often where physicians are combined in group practice, one subscribes for one *Journal of the American Medical Association* and other members of the group take the various special journals published by the American Medical Association. This is excusable.

This apart. Nowhere in the world can a physician obtain so much for the price he pays than for the *Journal of the American Medical Association*. Other national medical journals charge the same subscription price for the publications once a month. The British national weekly medical journals cost \$12.00 a year. The circulation of

the *Journal of the American Medical Association* has shown a steady increase. According to the trustees' report, it was larger by 4,344 at the end of 1935 than at the beginning. A strong central organization was never more urgent than at the present. A journal is necessary not only for the unification of the state and national interests of the medical profession but it carries to its readers every week, or month as may be, the best medical thought. It offers a true postgraduate course in medicine.

A bill has been introduced into the New York State legislature forbidding physicians to advertise for patronage. It forbids the coöperation with unlicensed practitioners. The act closes every channel of publicity to the physician except the unpaid person to person endorsement on which the reputation of the reputable practitioner of medicine is built. Commenting, the *New York State Journal of Medical* says:

"There is nothing in the Feld bill that would restrict the prerogatives of reputable physicians, deprive the public of any essential service or deplete the legitimate revenues of honest advertising media. If anything, it would rid the responsible practitioner of unscrupulous competition and protect the ignorant and gullible layman against exploitation."

A TOUCH OF SPRING

Do I sleep? Do I dream? Do I wonder?

The day is undoubtedly fine;

By some unaccountable blunder

Its mood is not brusque but benign,

There is warmth in the sunshine whose mintage

Was lately a palpable bluff—

But this has a touch of true vintage,

The genuine stuff.

And I know that I cannot be sleeping,

For out in the garden are spread

Green tips of the daffodils peeping

From what was a sombre brown bed;

Though planted last autumn and tidied,

All vacant that bed has long stood,

Till I thought that the bulbs had decided

To stay down for good.

A choice I was far from commending;

Yet, frankly, I thought to my woe

That the winter was simply unending

And never intended to go.

I was wrong, I was wrong—I beg pardon;

Here is warmth and the winter is past,

And the daffodil shafts in the garden

Have popped up at last!

—*Manchester Guardian*.

A man on trial for his life was being examined by a group of alienists. Suddenly one doctor jumped up and shouted at him:

"Quick, how many feet has a centipede?"

The man came back in a dry, dry voice:

"Gad, is that all you have to worry about?"—*Troy (N. Y.) Times-Record*.

BE PREPARED FOR YOUR CANCER PATIENT

FUTURE PROGRESS IN CANCER*

We all have a tendency at times to become rather easily satisfied with our progress and accomplishments. It is easy for us to believe that our country, our city and our neighborhood are the best. Loyalty and patriotism are, of course, praiseworthy attributes. Sometimes, however, it becomes necessary or advisable to stop and take inventory of our progress and accomplishments. Critical appraisal of ourselves and our deeds should lead to improvement. Too much optimism and self-satisfaction are obstacles to progress. The medical profession of Detroit reads proudly in the daily newspapers of their city's high health rating and modestly accepts some of the credit. We like to think and talk of this country's sanitation and improved living conditions and are inclined to pity those who are forced to live elsewhere. As a matter of fact, the United States occupies tenth place as a healthful country if we are to judge by comparative death rates. There are nine other countries with a lower mortality rate than ours. In the report of the recent cancer survey made in Michigan by Dr. Frank L. Rector which is now being published serially in the JOURNAL, the statement is made that only eight hospitals in Michigan have cancer clinics approved by the American College of Surgeons, that only eighteen hospitals in Michigan are equipped for deep x-ray therapy and that there is only one-third the necessary amount of radium in Michigan. In fact, there are certain hospitals or cancer centers in this country and in Europe that possess more radium than can be found in this whole state. Not only is it important that radium is recognized as a necessary part of cancer treatment, but the insufficient amount available illustrates our general deficiency in cancer diagnosis and treatment facilities. Sweden, Norway, Denmark and France have provided cancer centers and have secured provision for adequate irradiation. Results of cancer treatment in these countries are superior to the average results obtained in this country, and

besides Europe is doing more research work in cancer than we are. In the United States, outside of Massachusetts, public cancer facilities are unorganized, although some private institutions have supplied the need. Our attitude toward the cancer situation is too frequently a combination of hopelessness and helplessness, a feeling that we are doing all we can about a terrible and uncontrollable disease. For both the public and the profession to replace some of its pessimism with optimism would be a constructive step.

The diagnosis and treatment of cancer is not a one-man job and cancer progress is going to depend largely on organization. This means organization of facilities for diagnosis and treatment, follow-up study and clinical research. It implies standardization of treatment because uniformity of methods and technic will lead to greater progress than rugged and stubborn individualism.

The diagnosis and treatment of cancer is a group problem—the group being composed of the representatives of various specialties, the nucleus of which is the surgeon, the internist, the radiotherapist and the pathologist. That is why the American College of Surgeons is striving for the organization of cancer groups in all large hospitals. The minimum standard for cancer clinics in general hospitals prescribed by the College is as follows:

1. Organization—staff representatives as outlined above, one of whom shall be the executive officer, and in addition a secretary and social worker.
2. Regular conferences of consultation for the discussion of diagnosis and treatment by the group.
3. Reference of all cancer patients in the hospital to the clinic to be voluntary or obligatory as determined by the hospital administration.
4. In addition to diagnostic and surgical facilities, adequate deep x-ray therapy equipment and a sufficient amount of radium shall be available.
5. Records to include history and examination of patients, treatment record and periodic follow-up examinations for at least five years following treatment.
6. The staff of the cancer clinic shall be responsible for treatment of cancer patients.

The objection will naturally be raised that the real or threatened organization of medicine is proceeding at such a rapid rate that much of the average doctor's practice is being taken away from him.

*The sixth paper published under the authority of the Cancer Committee of the Michigan State Medical Society.

If the organization of cancer treatment did encroach on the practice of medicine, it would not affect the average practitioner because as a rule he is not a cancer surgeon or a radiotherapist. These two groups constitute a small minority of the physicians in any community. Though small, this group includes many of the greatest members of the profession—great not only in their work but in their ideals. Their magnanimity and humanity would not allow mercenary considerations to stand in the path of reducing cancer mortality. The satisfaction of being able to challenge the public's criticisms of the medical profession would be a stimulus to greater effort.

There is very little chance, however, of any financial loss to the profession being necessary. Cancer organization would of course include cancer education—the dissemination of accurate information through the medical profession to the public for the purpose of displacing ignorance and hysteria with a calm healthful knowledge of cancer. That the increased interest in cancer resulting from cancer education will be profitable to the medical profession, there can be little doubt. This is well illustrated in the increased interest in cancer on the part of the public in any community following a series of newspaper articles, radio addresses or lay cancer talks. This can be observed in the average doctor's office.

Preventive medicine has been shown to be as profitable as curative medicine. Preventive medicine in the form of periodic health examinations pays dividends both to the public and the profession. This would

be as true of cancer as of communicable diseases.

Cancer does not offer extensive commercial possibilities to the profession. A high percentage of cancer patients are destitute in the beginning and few are fully able to meet the high cost of cancer treatment and the associated hospitalization. Any improvement in cancer facilities must include those for treating indigent as well as private patients.

The early recognition of cancer rests largely with the general practitioner. His function must be both diagnostic and educational. He might not always be able to make a positive decision as to the presence of malignancy but he can always obtain assistance to verify or nullify his suspicions.

In any large cancer service the failure of some doctor to recognize cancer at the proper time, the treatment of a questionable lesion expectantly, or temporizing after a positive diagnosis has been made is unfortunately a frequent observation. Examples could be cited at length.

There are many keys to the solution of the cancer problem, all of which will have to be used, but the most important is in the hands of the man or woman in general medical practice. This branch of medicine is in intimate contact with the public and is in a position to influence the habits and practices of the people. In his strategic position the family doctor needs only to apply alertness, cancer-mindedness and quick action and in the not too distant future advanced and neglected cancer will be as rare as smallpox and typhoid fever are today.

UNIVERSITY OF MICHIGAN
THE DEPARTMENT OF POSTGRADUATE MEDICINE
and the
MICHIGAN STATE MEDICAL SOCIETY
announce
Intensive Postgraduate Courses

Detroit

Gynecology, Obstetrics and Gynecological Pathology May 18-23
General Medicine..... May 25-30

Ann Arbor

Roentgenology June 29-August 7
Laboratory Technique.. June 29-August 7

The post-graduate courses of the Upper Peninsula will be given at the time of the annual meeting of the Upper Peninsula Medical Society in August.

For further information address:

Department of Postgraduate Medicine
University Hospital
Ann Arbor, Michigan

DEPARTMENT OF SOCIETY ACTIVITY

C. T. EKLUND, M.D., Secretary

COUNCIL CHAIRMAN'S COMMUNICATION

"We are not politicians" was the lofty comment of a certain physician when the subject of better organized medical societies was being discussed recently. In this, I must agree with my confrère. We physicians are not and cannot be politicians. However, we *are* citizens, and during these perilous times when dangerous influences are besetting us in our dual capacity as physicians and as taxpayers it behooves us to be good citizens.

Good citizens know the problems of their country; further, they act to solve these problems and to eradicate their enemies. Their thinking may be individual, but their action is organized. They rely on numbers—on an army—to protect and, where necessary, to attack. Today single-handed duelling is as effective as tilting at a machine gun. Modern methods for modern days!

Organized medicine requires stronger organization—right now. We in Michigan have the outline, a good foundation, but we must have the support of every county medical society manned 100 per cent, if we hope to make continued progress. No halfway measures are acceptable today. If the ranks are filled with blank spaces, the enemy will squeeze through, and our army will be shattered.

Line up your members, build up your strength, make organized medicine stronger. Our aims and purposes are good—always in the interests of better medicine and public health. "One for All, and All for One."

HENRY COOK, M.D.

COUNTY HEALTH UNITS

If your county has no organized health department or service you should know that *right now* one may be in process of organization. Over \$200,000.00 is to be expended in Michigan this year in the establishment of new, or in the augmentation of existing county health units. Approximately half of the counties of Michigan have

organized health units. Many of these have been seriously crippled for lack of funds. It is to restore public health activities to normal in these areas and to provide new agencies in some of the vast areas which have hitherto had no public health organization whatever (except that provided by the State Department of Health) that this money is to be spent.

If your county is one in which a new organization is to be placed, or in which a reorganization of the existing county health unit is contemplated, your county society should interest itself in the matter. These units are planned as administrative and educational agencies. In such a program physicians have two responsibilities: first, to provide coöperation in the establishment and operation of such agencies and, second, to practice a quality and quantity of preventive medicine among our own patients that the occasion will never arise when health agencies need, themselves, to practice preventive medicine.

This money will be spent, this year. It is largely for you to say how.

MATERNAL AND CHILD HEALTH

FIFTEEN counties have been picked in which \$80,000.00 is to be spent during the coming year as outlined on page 269 of the April JOURNAL OF THE M.S.M.S. These counties are: Cass, St. Joseph, Lenawee, Livingston, Lapeer, Tuscola, Muskegon, Manistee, Ionia, Clinton, Montcalm, Gratiot, Delta, Iron and St. Clair.

These county societies are advised herewith, that the entire program has been carefully discussed by the Executive Committee in collaboration with the Bureau of Child Hygiene and Public Health Nursing of the State Department of Health. You are also advised that before the program is set up in any county the county medical society will have opportunity to go over it in detail and will be asked to appoint a special advisory committee which will not only advise but may determine whether any part or the whole of the proposed program shall be put into effect.

The success of the program will be directly proportional to the degree of coöperation afforded by individual physicians throughout the fifteen counties. Nurses working in each county are instructed to contact only licensed Doctors of Medicine. Osteopaths, chiropractors and other cultists will not be asked to coöperate. There will be no clinics and no treatment or advice with reference to treatment is to be given. The major purpose of the program is to reduce infant and maternal mortality through more and better pre- and post-natal care, the doctor to provide the pre- and post-natal treatment, the public health nurse to educate expectant mothers in its importance and to provide instruction in ordinary infant care. Lectures are to be given to older girls in the care of infants and growing children and to lay groups of women on pertinent subjects. Copies of these contemplated lectures are to be submitted to the local advisory committees before presentation to these lay groups. Copies of the whole county plan including the controlling stipulations will be presented to each individual physician when the plan is put into effect in any county.

COUNCIL AND COMMITTEE MEETINGS

1. *March 18, 1936*—Special Contact Committee to Governmental Agencies and Allied Groups—Olds Hotel, Lansing—7:00 p. m.
2. *April 5, 1936*—Subcommittee of Legislative Committee—Olds Hotel, Lansing—12:30 p. m.
3. *April 10, 1936*—Maternal Health Committee—University Hospital, Ann Arbor—11:00 a. m.
4. *April 19, 1936*—Maternal Health Committee—University Hospital, Ann Arbor—11:00 a. m.
5. *April 22, 1936*—Executive Committee of The Council—Olds Hotel, Lansing—3:00 p. m.
6. *April 25, 1936*—Legislative Committee—W.C. M.S. Building, Detroit—6:00 p. m.
7. *April 30, 1936*—Mental Hygiene Committee—Statler Hotel, Detroit—6:30 p. m.
8. *May 3, 1936*—Maternal Health Committee—Olds Hotel, Lansing—10 a. m.
9. *May 6, 1936*—Public Relations Committee—Statler Hotel, Detroit—3:00 p. m.
10. *May 7, 1936*—Radio Committee—W.C.M.S. Building, Detroit—12:00 noon.
11. *May 20, 1936*—Executive Committee of The Council—Statler Hotel, Detroit—3:00 p. m.
12. *May 22, 1936*—Joint Committee on Public Health Education—Michigan Union, Ann Arbor—12:00 noon.
13. *May 22, 1936*—Legislative Committee, Ann Arbor—6:00 p. m.

MAY, 1936

MINUTES OF MEETING OF EXECUTIVE COMMITTEE OF THE COUNCIL, WITH THE PUBLIC RELATIONS COMMITTEE, AND THE SPECIAL CONTACT COMMITTEE TO GOVERNMENTAL AGENCIES

March 18, 1936.

1. *Roll Call*.—The meeting was called to order by Dr. Henry Cook, Chairman, 7:40 p. m., in the Lansing City Club, Lansing. Present were Dr. Cook of Flint, Drs. T. F. Heavenrich of Port Huron, C. E. Boys of Kalamazoo, A. S. Brunk and H. R. Carstens of Detroit, and F. E. Reeder of Flint. Also present were Councilors H. H. Cummings of Ann Arbor, J. E. McIntyre of Lansing, T. P. Treyner of Big Rapids, P. R. Urmston of Bay City, V. M. Moore of Grand Rapids, Wm. E. Barstow of St. Louis; also President G. C. Penberthy of Detroit, Drs. L. Fernald Foster of Bay City, Roy H. Holmes of Muskegon, A. V. Wenger of Grand Rapids, F. T. Andrews of Kalamazoo, F. B. Miner of Flint, E. I. Carr of Lansing, A. H. Whittaker, Ralph H. Pino, and S. W. Insley of Detroit, Claude Keyport of Grayling, T. K. Gruber of Eloise, Wilfrid Haughey of Battle Creek, H. B. Fenech of Detroit, I. W. Greene of Owosso, L. G. Christian of Lansing, E. R. Witwer of Detroit, R. C. Perkins of Bay City, Fred Drummond of Kawkawlin, and Executive Secretary Wm. J. Burns.
 2. *Minutes*.—The minutes of February 26, 1936, were read and approved.
 3. *New Councilor*.—Dr. Cook introduced Dr. Wm. E. Barstow, newly appointed member of the Council; also Dr. Wilfrid Haughey of Battle Creek, who was Secretary of the M.S.M.S. twenty-five years ago, and Dr. F. E. Reeder, Speaker of the House of Delegates.
 4. *Relief Medicine*.—Dr. S. W. Insley reported for the Subcommittee on Relief Medicine. He stated that we must look at the problem in a practical way as it is no longer a matter of the future but right with us now, with the Social Security Act on the statute books and the monies being transferred from the Federal Government to the various states. Dr. Insley stated that the total cost to the State for all forms of medicine runs into millions of dollars each year, a great invasion into a private enterprise. We do not like state medicine and must protect ourselves. The medical profession deserves to be treated the same as the purveyor of any other necessity. The entire figures are not ready, but the breakdown of the Social Security Act can be completed readily. The medical profession must keep in mind that the State poor laws will undoubtedly be recodified at the next meeting of the Michigan Legislature.
- Dr. Ralph H. Pino reported on the activities of the Medical Economics Committee. Dr. Henry Cook stated that the Probate Judges Association has under consideration the recodification of the probate laws, and that the M.S. M.S. must coöperate with this group, and pass on to all officials the necessity for better economic investigation, so that the medical investigation is not blamed for the faults of the economic filter. Dr. Foster stated that the P.R.C. had 35 letters from the probate judges in which no criticism of the medical filter boards appeared, and that any criticisms are against the economic investigation.

Social Security Act—Maternal and Child Health Phase.—President Penberthy reported on meeting with Health Commissioner Slemmons and Dr. Lillian Smith in Detroit on March 17. Present were Drs. Slemmons, Smith, B. W. Carey of the Children's Fund of Michigan, E. E. Martner of the Detroit Pediatric Society, L. O. Geib, R. H. Pino, C. T. Ekelund, and G. C. Penberthy of the M.S.M.S., Health Commissioner H. F. Vaughan of Detroit, Miss Hamilton and Miss Sargent of the Nurses Association. With Social Security Funds, the State Health Department intends to develop the following program:

- (a) Women's classes in rural communities, with instruction in prenatal care for eight weeks, given by women physicians.
- (b) Classes in high schools.
- (c) Prenatal program with women, through the county medical societies.
- (d) Instruction given to expectant mothers, as desired by physicians.
- (e) Courses in public health nursing; courses for physicians; courses for sanitary engineers.

Dr. Penberthy reported that all activities and work will be done through the county medical societies. The Health Department stated that very efficient work can be done where there is a county health unit. Refresher courses for physicians may be provided later on, in coöperation with the Advisory Committee on Postgraduate Education.

Dr. Penberthy stated that private physicians must take an interest in this program and help to direct it into correct channels. General discussion. Motion of Drs. Carstens-Brunk that this matter be referred to the Preventive Medicine Committee and the Maternal Health Committee, and that the Chairmen of these Committees contact Dr. Lillian Smith at an early date. Carried unanimously.

Dr. Miner spoke of the Alabama State Medical Society, which nominates the State Board of Health and the State Health Commissioner.

5. *Problems of Relief Medicine.*—Chairman Cook presented some of the problems of relief medicine, stating that the medical profession has come to a pass, that it must outline a policy to pursue, and that a good background has been established recently with governmental agencies, and that something has been accomplished. Dr. Fenech gave a résumé of the events leading to Resolution of the Crippled Children Commission made March 9, 1936, approved by the Administrative Board on March 10, but subsequently vetoed by the Governor. A report on the work of the Filter Committee was given by Dr. Foster, showing that the probate judges believed it had cut down the number of cases. The medical filter seems to be working efficiently, but the economic investigations are not what could be desired in all counties. The Governor has discovered that it is certain professional and amateur social workers who are increasing the case load, and not the physicians; nevertheless, he recommends that the physicians' fee schedule be cut 50 per cent and the hospitals' rates be cut 12 per cent. General discussion showed that the consensus was for nonacceptance of anything but a just fee—that Schedules A and C represented cost price, and anything below that was unjust. Dr. Witwer spoke for the roentgenologists and protested against the fee schedules for radiologists as they now stand.

General discussion. Motion of Drs. Carstens-Reeder that the Chair appoint a committee to draw up resolutions and bring same back to the Executive Committee of The Council as soon as possible. Carried unanimously.

Committee: Drs. Foster, Cummings, Witwer, Penberthy.

Later, the Special Committee presented its report through Dr. Foster, which was discussed fully. Motion of Drs. Carstens-Heavenrich that it is the sense of the Executive Committee of The Council that a reduction from Schedules A, B, C, D (compensation and rates under the Afflicted-Crippled Child Laws) is not acceptable to the medical profession of the State of Michigan as not covering the actual cost of furnishing such care, and that a committee be appointed composed of Drs. Penberthy, Cook, Cummings, Foster, and Insley to confer with the Governor concerning medical relief. Carried unanimously. This Committee agreed on Wednesday, March 25, as the most agreeable time to come to Lansing for this meeting.

6. *Workmen's Compensation Insurance.*—The Executive Secretary reported on premium for this insurance on employees and officers of the M.S.M.S., full or part time. Motion of Drs. Boys-Brunk that ample coverage be provided for the full and part time employees and officers of the M.S.M.S. under Workmen's Compensation Laws. Carried unanimously.

7. *Annual Meeting of 1936.*—The Executive Secretary reported on arrangements and progress being made, which was approved by the Executive Committee.

8. *Bond Exchange.*—Treasurer Hyland's report on exchange of certain bonds was approved.

Membership: 1,220 have paid 1936 dues and 19 have paid 1935 dues since January 1, 1936. The March issue of THE JOURNAL showed a profit of approximately \$100 in the strictly business income (advertising, etc.) over expense (printing). This was due to increased advertising.

9. *Service to New Members.*—The Secretary of the Washtenaw County Medical Society recommended that a copy of the Constitution and By-Laws of the State and county medical societies be presented to each new member as elected, as well as information on the activities of organized medicine, in order to increase the appreciation of new members for the tremendous work of their medical societies. The Executive Committee approved this recommendation and ordered same to be carried out.
10. *Bureau of Information and Speakers' Bureau.*—The recommendation of the Legislative Committee and of the Public Relations Committee that a Bureau of Information and a Speakers' Bureau be developed in the M.S.M.S. was presented. The Special Committee (Drs. Penberthy, Ekelund, Dempster, and Mr. Burns) gave its report urging the principle of controlled releases for purposes of publicizing information. Each committee shall specifically designate in its official transactions the material to be released; the story shall be written in the Executive Office, and approved prior to release by the committee authorizing the publicity and if possible by the Executive Committee of The Council. Later, the program can be developed to disseminate scientific or medical information. The public reaction to the work of the Bureau

of Information will naturally result in a necessity for the creation of a Speakers' Bureau.

Motion of Drs. Brunk-Boys that these matters be referred to the Public Relations Committee to develop. Carried unanimously.

11. *Adjournment*.—The Chair thanked the many who attended for their kindness in coming great distances to bring their advice and suggestions, which were sincerely appreciated. He adjourned the meeting at 11:55 p. m.

MINUTES OF MEETING OF COMMITTEE ON MEDICAL ECONOMICS

March 22, 1936.

1. *Roll Call*.—The meeting was called to order in the Olds Hotel, Lansing, by Dr. Ralph H. Pino, Chairman, at 2:15 p. m. Present were Drs. Pino, Detroit, E. I. Carr of Lansing, and Ferris Smith of Grand Rapids. Also present were Secretary C. T. Ekelund, Pontiac, and Executive Secretary Wm. J. Burns. Absent were Drs. F. A. Baker, Pontiac, H. F. Becker, Battle Creek, S. W. Insley, Detroit, G. A. Seybold, Jackson, and W. H. Marshall (Advisor) of Flint.
2. *Minutes*.—The minutes of November 20, 1935, were dispensed with on motion of Drs. Smith-Carr and carried.
3. *Brief and Brochure*.—From the Executive Committee of The Council came request to study proposed Brief to be sent to physicians and to the public as debate material against the socialization of medicine. The Brief was presented and read. Suggestion was made, after full discussion, that the Brief be distributed for debate purposes.
4. *Relief Medicine*.—Dr. Pino reported for Dr. S. W. Insley, Chairman of the Subcommittee on Relief Medicine: (1) The Committee is collecting data on the cost of distribution of medical care. (2) The Committee is analyzing the state poor laws and medical aspects of the Social Security Act. (3) The Committee is devising a program to fit into a recodification of the state poor laws.
5. *Study of Industrial Medicine*.—This matter will be presented at the next meeting of the Committee.
6. *Study of Group Hospitalization*.—Dr. Becker, Chairman, is ill, but report was presented by Dr. Pino that this Subcommittee has received letters from the Attorney General and the Insurance Commissioner of Michigan stating that group hospitalization is illegal in Michigan without further legislative enactment; the Subcommittee is accumulating much material for its study.
7. *Postgraduate Medicine for the General Practitioner*.—This Subcommittee held a meeting in Detroit on February 17, 1936, the minutes of which were presented to the Economics Committee. This Subcommittee will need more time for further study. The Executive Secretary was instructed to wait until the Subcommittee considers hospital postgraduate work at greater length before sending out questionnaire.

8. *Life Insurance Medical Examinations*.—This matter, referred by the House of Delegates to the Economics Committee (pages 719 and 733 of November, 1935, JOURNAL, M.S.M.S.), was explained by Dr. Pino. Dr. Holmes was not present so the matter was held over until the next meeting, to which Dr. Holmes is to be invited.

9. *American Foundation Studies in Government*.—A letter from this Foundation asking for information re Mutual Health Service Plan was referred to the Executive Committee of The Council.

10. *Economics Committee Exhibit*.—Dr. Ekelund displayed photograph of exhibit prepared by the Economics Committee of the Pennsylvania State Medical Society for its annual meeting.

11. *Adjournment*.—The Chair thanked all for their attendance and good advice and adjourned the meeting at 5:40 P. M.

MINUTES OF MEETING OF THE PUBLIC RELATIONS COMMITTEE

April 8, 1936.

1. *Roll Call*.—The meeting was called to order by Dr. L. Fernald Foster, Chairman, at 3:00 P. M., in the Olds Hotel, Lansing, Michigan. Present were Drs. Foster of Bay City, F. T. Andrews of Kalamazoo, E. I. Carr of Lansing, F. B. Miner of Flint, P. A. Riley of Jackson, A. V. Wenger of Grand Rapids and A. H. Whittaker of Detroit. Also present were Drs. L. O. Geib of Detroit, I. W. Greene of Owosso, Mr. Clair Gates of the Joint Committee on Public Health Education, Ann Arbor, and Executive Secretary Wm. J. Burns. Absent were Dr. R. H. Holmes of Muskegon (ill) and Dr. J. J. Walch of Escanaba. Also present was Dr. Lillian Smith.
2. *Minutes*.—The minutes of March 18 were approved as printed and distributed to Committee members, on motion of Dr. Andrews, seconded by several and carried unanimously.
3. *Maternal and Child Health Work in Michigan, under Social Security Act*.—Dr. Lillian Smith of the State Department of Health, invited to this meeting to outline the Maternal and Child Health Program in Michigan under the S. S. Act, presented the tentative program prepared by the State Department of Health to cover activities to July 1, 1936. Dr. Smith agreed:
 - I. That before any program is set up in the county, its county medical society will be contacted in a meeting of that society.
 - II. That the county medical society will immediately appoint an advisory committee of physicians whose advice will at all times be taken into consideration and that no plan will be put into effect of which this advisory committee does not approve.
 - III. That the program will include no clinics, treatments, or advice with reference to treatment of any kind—in other words, the program includes coöperation only with the private physician.
 - IV. That any over-activity of lay groups as a result of this educational program will be discouraged and curtailed as far as

possible according to the advice of the advisory committee of physicians.

- V. That contemplated lectures to lay groups will first be presented in synopsis form to the local county medical society or its advisory committee and that detailed copies will be provided to each member of the society before presentation to lay groups.
- VI. That copies of the whole county plan including these stipulations will be presented to each individual physician when the plan is put into effect in a county.
- VII. The plan as presented by the State Department of Health will cover mainly activities in rural areas. It has to be approved by the Maternal Health Committee, the Preventive Medicine Committee, and the Public Relations Committee of the Michigan State Medical Society, and by the Executive Committee of the Council of the Michigan State Medical Society.

All phases of this presentation were discussed and many questions asked, which were answered by Dr. Smith. Motion of Drs. Carr-Riley that the program as presented by Dr. Lillian Smith involving the above points agreed to by Dr. Smith verbally, when presented in writing for purposes of publicity, has the endorsement of this Committee. Carried unanimously.

4. *Department of Tuberculosis in the State Health Department.*—This matter was presented by Dr. Geib, Chairman of the Preventive Medicine Committee, and was fully discussed by all members present. Motion of Drs. Miner-Wenger that the Public Relations Committee endorse a Department of Tuberculosis in the State Department of Health. Carried unanimously. This is to be referred to the Executive Committee of the Council, M. S. M. S.
5. *County Health Units.*—Dr. Geib also presented the advantages of county health units when functioning as educational and administrative units—*not practicing units*. It was felt that mention of such advantages might be included in the next letter from this Committee going to the county medical societies.
6. *Exhibit of Michigan Tuberculosis Association.*—Dr. Foster explained this educational exhibit, and that same involved short talks to be given by members of the county medical society wherein said exhibit was temporarily located. Motion of Drs. Andrews-Miner that this exhibit be called to the attention of county medical societies in the next P. R. C. letter, with the suggestion that said exhibit is available for use in the various counties.
7. *Joint Committee on Public Health Education.*—Mr. Gates asked how the Joint Committee could work through the county medical society to obtain the most effective results in securing speakers to talk on health subjects before lay groups. The work of the Cancer Committee, the Maternal Health Committee, and the Preventive Medicine Committee was considered along this line in the discussion. The P. R. C. felt that Mr. Gates and the Joint Committee could obtain best results by consulting with the Michigan State Medical Society regarding the program, and with the county medical societies re securing list of good speakers. No formal action was taken pending meeting of Joint Committee.

8. *Integration Work.*—Report was given on the few county medical societies which are still unorganized as far as the medical filter and the economic filter are concerned. Attention was called to the fact that some county medical societies do not meet regularly and that it is impossible for a member of the P. R. C. to integrate any program because of the lack of opportunity of contacting the physicians of that area assembled in a body, with a quorum sufficient to take action on important matters. Motion of Drs. Riley-Wenger that the P. R. C. respectfully recommends to the Executive Committee of the Council that it direct every Councilor of the Michigan State Medical Society to see that the county medical societies in all districts hold regular meetings. Carried unanimously. Motion of Drs. Andrews-Wenger that every county medical society be requested to submit to the Executive Office the date of its regular and annual meetings, for publication in THE JOURNAL every month. Carried unanimously.

Motion of Drs. Miner-Andrews that the P. R. C. recommend in its letter to county medical societies that they hold their annual meetings, with election of officers and delegates, in the Autumn, shortly after the Annual Meeting of the Michigan State Medical Society. Carried unanimously. This will aid the Speaker of the House of Delegates to organize the House practically one year in advance, and permit committee members ample time to study problems presented to them and to make recommendations at the succeeding session of the House. To accomplish the last item, it was pointed out that the By-Laws and Constitution of some county medical societies would have to be changed. Attention was called to the fact that some county society By-Laws did not agree with those of the Michigan State Medical Society in important sections, such as membership requirements and rules and procedure in ethical matters. Motion of Drs. Carr-Miner that the P. R. C. recommend to each county medical society that it study its By-Laws and Constitution and amend same where necessary to agree with those of the Michigan State Medical Society. Carried unanimously.

9. *Afflicted-Crippled Child Problem.*—The Executive Secretary reported on meeting of Special Committee of the M. S. M. S. with Governor Fitzgerald on March 25, on Dr. S. W. Insley's letter of March 27, giving estimate of cost of medical care for three months at \$150,000, on the Crippled Children Commission meeting of April 6, in which Schedules A, B, C, and D were reestablished.
10. *Better Physician-Public Contact.*—Dr. Whittaker presented his outline on how to effect this result, and suggested the creation of a Public Health League of Michigan. Dr. Greene stated that concentrated action along this line was imperative and that something aggressive must be done at once to protect physicians, dentists, and nurses—and the public—against adverse legislation and to interest the public in good health legislation. General discussion resulted in motion of Drs. Carr-Andrews that a Subcommittee be created, with Dr. Whittaker as Chairman, to study and expand the report as submitted, and to refer its findings and recommendations back to this Committee for appropriate action. Dr. Whittaker was given power to appoint the per-

sonnel of his Subcommittee. Carried unanimously.

11. *Bureau of Information.*—This matter was referred to the P. R. C. to develop (from Executive Committee of The Council, March 18, 1936). Discussion. Motion of Drs. Whittaker-Wenger that a Subcommittee be appointed to draw up plans regarding a Bureau of Information and submit same at the next meeting of the P. R. C. Carried unanimously.

Committee: Dr. E. I. Carr and Mr. Wm. J. Burns.

12. *Speakers' Bureau.*—The matter of creating a Speakers' Bureau had also been referred by the Executive Committee of The Council, on March 18, to the P. R. C. to develop. Discussion. Motion of Drs. Whittaker-Wenger that the Executive Secretary be authorized to draw up plans for a Speakers' Bureau and submit same at the next meeting. Carried unanimously.

13. *Integrating Ethics Committee.*—The suggestion of Dr. Henry Cook that Ethics Committees be integrated in every county medical society was discussed by this Committee. It was felt that same should be recommended to the county medical societies in the letter going out from the P. R. C.

14. *Reclassification of Crippled and Afflicted Children.*—Facts were presented wherein an afflicted child case had been arbitrarily transferred as a crippled child case, necessitating the removal of a convalescent patient from a Lansing hospital to a Detroit hospital. This was fully discussed by the Committee and resulted in a motion of Drs. Whittaker-Wenger that the P. R. C. respectfully recommends to the Executive Committee of The Council, M. S. M. S., that a Committee be appointed to review the classifications of the afflicted child and the crippled child. Carried unanimously.

15. *Rural Medicine.*—A letter from Dr. R. G. Leland of the A. M. A., inquiring about rural medical service in Michigan, was read, and referred to the Medical Economics Committee for reply. It was felt that Dr. Wm. H. Marshall or the members of the Subcommittee on Postgraduate Education for the General Practitioner might have information on this subject.

16. *Medical History for Probate Judges.*—It was recommended that in the P. R. C. letter to county medical societies the medical filter boards present after each meeting a detailed medical history to the probate judge, giving a short report of every case, a diagnosis in plain English, and full recommendations. This is being requested by the probate judges.

17. *Adjournment.*—The Chair thanked all for their attendance and good advice, and adjourned the meeting at 7:35 P. M.

"Tommy Simpson, have you any good excuse for being late this morning?"

Tommy: "Yes—we had waffles and syrup for breakfast."—*Pathfinder.*

COUNTY SOCIETIES

CALHOUN COUNTY

The March meeting of the Calhoun County Medical Society was called to order by President Dr. Winslow at 8:00 p. m., Tuesday, March 3, 1936, at the Kellogg Hotel.

The minutes of the last meeting were approved as printed in the *Bulletin*.

There were no reports of officers except the announcement by the president of the death of Dr. Chauncey during the month.

The Necrology Committee had no report ready.

The secretary reported several communications from the secretary of the Michigan State Medical Society, regarding the status of the Crippled and Afflicted Children's work, also other details of administration. He read a letter from Mrs. Lessard, Dr. Johnson's sister, thanking the Society for its resolutions.

Two applications for membership were read, first reading, and under the rules held over for action of the board of directors and vote next meeting: Dr. C. W. Royer and Dr. C. M. Mercer.

Dr. Winslow announced that the University is anxious to secure antiques of a medical nature, either as gifts or as loans, for exhibition purposes.

The chairman of the Program Committee introduced the speaker of the evening, Dr. A. C. Furstenburg, professor of Oto-Laryngology and dean of the Medical School at Ann Arbor.

Dr. Furstenburg gave a very timely and practical paper on "Acute Infections of the Throat and Neck." He especially emphasized three essential infections: Peritonsillar Abscess or Quinsy, Pharyngeal Abscess, and Ludwig's Angina. He outlined the anatomy of the throat, showing how these conditions are circumscribed and pointed into certain directions, by bone, fibrous sheath, fascia, et cetera, and gave the treatment.

The discussion was limited largely to a few questions and remarks, mostly from the nose and throat men.

The lantern was used throughout and about fifty slides shown.

Meeting adjourned.

Attendance at the dinner, 57; at the meeting, 65.

WILFRID HAUGHEY, M.D., *Secretary*.

DICKINSON-IRON COUNTY

At a meeting of the Dickinson-Iron County Medical Society, held March 19, 1936, W. H. Huron, of Iron Mountain, Michigan, was elected to fill out the remainder of the year as Secretary of the Society, taking the place of C. P. Drury, who left our Society, April 1, to take the position of full time Health Officer for the city of Marquette, Mich.

The meeting of the Society, on March 19, was a farewell dinner in honor of Dr. Drury and he was presented with a gift by the Medical Society in token of their appreciation of his work during his stay in Iron Mountain, Michigan.

W. H. HURON, M.D., *Secretary*.

EATON COUNTY

The Eaton County Medical Society held its March meeting on Thursday, March 26, 1936, at Grand Ledge. The Grand Ledge members, Drs. Imthun, Paine, McCoy, Stanka, Lown, and Schilz, were in charge of the dinner and program.

Following dinner, Dr. Moyer, President of the

Society, called the meeting to order and the minutes of the February meeting were read. The meeting was then turned over to Dr. Imthun, who introduced the speakers.

Dr. T. Wilensky of Eaton Rapids read a paper, "Maimonides the Physician." This was the second in a series of medical historical papers which this society has planned to incorporate at regular intervals into its programs. Dr. Wilensky stated that it is now almost to the day 801 years since the birth of the great Rambam, and as this Society had not paid tribute to him one year ago when world-wide celebrations were held in honor of his 800th anniversary, it was felt that the subject was extremely appropriate and timely.

Dr. L. M. Snyder of Lansing was then introduced as the speaker of the evening. His informally conducted talk, "Medicine in Crime Detection," proved to be more absorbing and exciting than a detective thriller. Dr. Snyder talked for two hours and when he sat down the audience, eager for more, plied him with many queries.

Dr. Snyder, who is also an attorney-at-law and who in addition to practicing medicine and surgery is an accredited medicolegal counselor, has made a special study of modern weapons in the war against crime. He stated that these devices and procedures are, without exception, startlingly new, revolutionary and some are even yet going through various stages of evolution and refinements. Even fingerprinting, which we today take for granted, is a comparatively recent development in the science of crime investigation. It, too, was forced to overcome the barrages laid down by the scoffers and die-hards until its worth was established beyond any question.

Dr. Snyder traced the origin and evolution of the science of ballistics in firearms identification. He thoroughly outlined the story and physics of rifling and grooving of gun barrels and explained why it was absolutely impossible for two guns to mark a bullet so that they were indistinguishable when examined by an expert in ballistics.

The ease with which filed-off gun numbers can be restored was a revelation to this reporter and this can be done many, many times on the same gun.

A process involving the use of a wax cast and a chemical reagent producing a colored product with nitrates was described for proving that a certain hand had recently fired a gun even though the gun in question was not in evidence.

Blood examinations for alcohol and for carbon monoxide in blood and tissues in cases of accident, suicide, and homicide were carefully and fascinatingly described.

Dr. Snyder stated that these blood tests were so accurate that the carbon monoxide change induced by the smoking of one cigarette could be very definitely detected.

He described also a newly devised test for drowning which is remarkably ingenious and reliable and which was first introduced by Dr. Gettler of New York. This test consists essentially of a comparison of the chloride content of the blood in the two ventricles. When an individual drowns in salt water, the chloride content of the left ventricle is the higher. In fresh water the reverse holds true because of the dilution which takes place on the left side.

Dr. Snyder also discussed very fully the indications, methods, and results of the use of scopolamine, the so-called "truth serum" of the tabloids, and the lie detector or recording pneumo-sphygmograph. Case histories were here recounted showing the almost miraculous results which may be obtained and the uncanny accuracy of these items of the armamentarium of the law when in the hands of experienced investigators. One strange case was described where-

in the scopolamine test definitely proved the innocence of a suspected murderer but during the questioning he surprisingly confessed to a murder twelve years before in Canada, in connection with which he had never been suspected.

The Society expressed its deep appreciation of Dr. Snyder for this unusual and extremely interesting talk.

Dr. G. M. Byington of the W. K. Kellogg Foundation, Battle Creek, spoke to the Society on the subject of the postgraduate course to be given at the Washington University School of Medicine, St. Louis. The indications are that this is to be an exceptionally fine program with a great abundance of material and the 125 men from seven counties who are to participate in it may well look forward to two weeks of unusually fine teaching and enjoyment.

Following a short business session the meeting adjourned at 10:30 P. M.

T. WILENSKY, M.D., *Secretary*.

GRAND TRAVERSE-LEELANAU-BENZIE COUNTY

The Grand Traverse-Leelanau-Benzie County Medical Society met in regular session at the Munson Hospital on April 7, 1936.

Miss Achsa Kinney, a member of the Traverse City High School debating team, presented the affirmative of the question "Socialization of Medicine." Her talk, based on factual material agreeable to this side of the question, proved very interesting to the members. It was previously understood that none of the members was to argue with the speaker. A last minute cancellation of the negative of this question was regretted.

The Society again agreed to coöperate with the city and county school nurses in conducting pre-school clinics with the objective of detecting and giving advice as to the correction of any defects found. They also agreed to set aside the hour between 4 and 5 o'clock on Saturday afternoons for immunization of children.

The Society approved the establishment of the proposed Red Cross First Aid Stations.

E. F. SLADEK, M.D.

MANISTEE COUNTY

We feel pretty proud of our local society. It is very seldom that our meetings are not attended by almost the entire membership. Even the night of the big blizzard, we had a creditable showing.

Our program is as follows: Business session, dinner, then either a social session, a speaker, an educational movie, or some form of entertainment.

Our dinners are unique. Two members are selected, one as cook, the other bull cook, the whole question of dinner being left to them. At the next meeting the bull cook is advanced to cook, and a new bull cook goes in. The variety is good, and you should see the food vanish.

The only reason that we are not 100 per cent is that we have one member in a far corner of the county who has had his membership in an adjoining Society for years, and in another corner we have one that has practically retired.

We may be small in number, but our members are enthusiastic workers in promoting interesting and worthwhile meetings.

C. L. GRANT, M.D., *Secretary*.

With Salt and Water

Doctor—Have you 'ever gargled your throat?

Sailor—Yes, I was shipwrecked three times.

OAKLAND COUNTY HOLDS "STATE SOCIETY NIGHT"

On Tuesday, April 21, the travelling circus of the Michigan State Medical Society made its latest one night stand. The troopers were in fine fettle that night in spite of a prolonged dry spell. The performance was held in the Birmingham Community House and was enjoyed by a goodly gathering augmented by a number of visitors from neighboring counties.

President Penberthy led off the evening's festivities. His "Ten Commendments" should be graven on stone too. They need to be read and heard by every one of us if we are to be led out of this wilderness.

Henry Cook, our ubiquitous Chairman of the Council, was next. He insisted, afterwards, that he spoke entirely extemporaneously but it seemed to some of us that his words were vaguely familiar. Be that as it may those present that night should be better members of their County Societies for having heard him.

Tony Reeder, our genial Speaker of the House of Delegates, surprised us all by making a fine speech in which he told only three stories. If your county hears Tony you will think twice before election time. You will elect officers of, and delegates from, your society for their fitness for the job, not because of seniority or for personal reasons.

Howard Cummings, the "young fella" from Ann Arbor, is Chairman of the Legislative Committee of the Michigan State Medical Society, Assistant Director of Postgraduate Medical Education and Councilor for the 14th district. He also practices and teaches Obstetrics and Gynecology. Howard has fine, high ideals and he fired us with them that night; ideals of personal and professional conduct and prestige and ideals for the future of medicine, through legislation and through Postgraduate Medical Education.

Editor Dempster told us how *not* to write case histories. Ted Heavenrich, Vice Chairman of the Council and long-time Councilor from the 7th district, spoke very pointedly on loyalty to organized medicine. Henry Carstens, of Detroit's first district, and Chairman of the Finance Committee of the Council, explained how we couldn't possibly be always wrong and told the one about the bore on the rubber-neck wagon to prove it. A. S. Brunk, of Detroit's other Councilor district (16th) dittoed the remarks of his fellow acrobats of the travelling circus, Secretary Ekelund stood mute on advice of Counsel and the grand finale was put on by none other than William Jennings Burns, who summarized most of what was, is, and will be happening in the affairs of organized medicine in Michigan.

Fred Baker proved an able ringmaster and put his talent through their paces in good order. To Aaron Riker, able program chairman of the Oakland County Medical Society, thanks were extended for excellent arrangements and appointments.

By way of anti-climax those with stories to tell or to listen to repaired to the nearby Kingston Inn for "drought relief."

Guests, other than those already mentioned, included: from Port Huron: Dr. J. H. Burley, A. L. Callery, G. M. Kesi; from Marine City: Drs. A. M. Armsbury, T. E. DeGurse; from Algonac: Dr. W. H. Boughner; from Crosswell: Drs. H. H. Learmont and R. K. Hart; from Snover: Dr. F. O. Kirker; from Marlette: Dr. J. C. Webster; from Mt. Clemens: Drs. J. M. Croman, Jr., and A. A. Thompson; from Detroit: Dr. D. D. Hurst of Henry Ford Hospital.

ST. CLAIR COUNTY

A joint meeting of Saint Clair County Medical Society with the Sanilac County Society was held at the home of Dr. H. H. Learmont in Crosswell, Michigan, Tuesday, April 7, 1936. Dr. J. H. Burley presided.

Despite very inclement weather, thirty-six members were present. Dr. C. D. Brooks and his associate, Dr. Murphy, both of Detroit, were present as guests. The evening was a great success not only from the standpoint of the splendid facilities enjoyed as the guests of Doctor Learmont, the excellent supper and cordial association, but also because of the instructive address of Doctor Brooks on "Diseases of the Gall Bladder." The speaker stressed the need for careful taking of case history, the establishment of an accurate diagnosis as soon as possible, the avoidance of diagnostic error, particularly in cases of angina pectoris and coronary disease, early operation to avoid damage to the liver parenchyma, drainage of the biliary tract (even if the condition of the patient precludes anything else) under local anesthesia, and the careful follow-up of operative cases, particularly as regards diet. Discussion was opened by Dr. A. J. MacKenzie and followed by Drs. E. C. Sites, E. W. Meredith, George Waters, D. W. Patterson and John Campbell, after which Doctor Brooks closed the program.

During the evening many compliments and expressions of appreciation were voiced for the fine entertainment provided by Doctor and Mrs. Learmont. The members of Saint Clair County Society voted to attend a meeting of the Oakland County Medical Society to be held at Birmingham on April 21, 1936.

GEORGE M. KESL, M.D., *Sec'y-Treas.*

WASHTENAW COUNTY

A regular meeting of the Washtenaw County Medical Society was held at the Michigan Union at 6:00 P. M. Tuesday, March 10. Sixty-five dinners were served, and about eighty-five members attended the program which followed.

Dr. Norman Miller presided. Dr. Howard Cummings introduced the speakers and their subjects as follows:

C. T. Ekelund, Secretary of the Michigan State Medical Society—"The Changing Practice of Medicine."

Grover Penberthy, President of the Michigan State Medical Society—"A Ten Point Plan for the State Society."

L. F. Foster, Chairman of the Public Relations Committee of the Michigan State Medical Society—"The Operation of Medical Filter Boards."

Following the presentations of these speakers, the report of the Public Relations Committee relative to the establishment of a medical filter system for Washtenaw County was brought before the house. This report had been sent to all members of the society for consideration previous to the meeting. It was moved by Dr. J. D. Bruce and seconded that the report be accepted. Unanimously adopted.

Dr. L. C. Grosh and Dr. Philip N. Brown were admitted as transfers from Lucas County, Ohio, and Jackson County, Michigan, respectively.

Just before adjourning, Dr. Foster read a newspaper item reporting that the Governor had vetoed the plans of the Crippled Children Commission to reinstate Schedule A on April 1.

Meeting adjourned at 7:55.

Drs. P. A. Riley and Monroe of Jackson were visitors.

JOHN V. FOPEANO, M.D., *Secretary.*

WOMAN'S AUXILIARY

MRS. A. M. GIDDINGS, President, 22 Riverview Ave., Battle Creek

MRS. KENNETH LOWE, Secretary-Treasurer, 107 Elizabeth St., Battle Creek

MRS. L. C. HARVIE, Press Chairman, 341 Brockway Place, Saginaw



MRS. L. GEIB, Detroit
Chairman Public Relations Committee

Dear County Presidents and Members:

The March number of the *News Letter*, the official communication from our national organization, brings to this desk much of interest and encouragement. Our national president, Mrs. Rogers N. Herbert, found during a recent extensive official journey that not only is enthusiasm for auxiliary work increasing among the members themselves, but everywhere appreciation is being expressed by members of the medical profession of the aims and accomplishments of the auxiliary.

It is the urgent advice of your president that this friendly, coöperative spirit between local medical societies and county auxiliaries be maintained. The advisory board of the medical society should be consulted frequently as to plans and purposes undertaken by our members. And no radically new project should be started without the coöperation and support of the men's organization. Find out the medical and health program needs of your community, and present a definite and practical program to your medical society for its approval. Acquaint the men with the resources available in auxiliary membership and organization for the promotion of work they wish done in the community. These activities, of course, will be coördinated with local demands of the national program. This coöperation with the local medical society must be emphasized as new officers begin laying their plans for a new year's activities.

As this number of the JOURNAL comes to hand the fourteenth annual meeting of the Woman's Auxiliary to the American Medical Association will be convening in Kansas City. Your president is looking forward with a great deal of pleasure to representing Michigan at this meeting. Our year's work

here is not yet completed, but I feel that much of interest can be reported from our state. With one new county unit definitely formed, and others showing keen interest in organization, we can furnish concrete evidence that auxiliary work is prospering in Michigan. Standing either in the lead nationally or close to the top in *Hygeia* subscriptions, we will be showing our attention to the national program. Although there remains much still to be done I feel that our accomplishments have been worth while and I will be proud to bespeak for Michigan a loyal and enthusiastic membership. Coöperation of officers, and members and department chairmen has made a profitable year possible and I sign myself,

Gratefully yours,
(Mrs. A. M.) LEAH M. GIDDINGS

Dear County Program Chairmen:

I am pleased to have this opportunity to thank the many County Chairmen of Program for the splendid coöperation given me during the past year, especially the response to the recent request for reports of the county programs.

The annual report of the Program Chairman of the Woman's Auxiliary to the Michigan State Medical Society is now filed with the National Chairman of Program to be given at the National Convention at Kansas City in May.

(Mrs. G. C.) BERNICE HICKS,
Chairman of Program

COUNTY NEWS ITEMS

Eaton County.—Eaton County Auxiliary reports two very enthusiastic meetings held recently. On February 27, seventeen members met at 7 p. m. for dinner with Mrs. Margaret Sheets. A short business meeting followed. Current events were discussed by Mrs. Marian Hargrave and a most interesting collection of moving pictures taken by Mr. and Mrs. Fred Cowan, of Charlotte, on their recent trip to Mexico City were shown by Mrs. Cowan, who gave a description of the trip.

On March 26, nine members of the Eaton County Auxiliary met at the Hotel Carnes, Charlotte, for a seven o'clock dinner. Mrs. Gertrude Wilensky, president, presided. The Auxiliary voted to donate \$5.00 to the Eaton County Red Cross. A nominating committee consisting of Mrs. Van Ark and Mrs. Sassamas was appointed and plans discussed for the annual meeting to be held in April. Mrs. Hans Kardel, County Agricultural Agent, gave a very instructive talk on "International Relations."

(Mrs.) MARIAN HARGRAVE,
Press Chairman

Kalamazoo County.—Covers were laid for seventy-eight members of the Woman's Auxiliary, Academy of Medicine, and the members of the Academy Tuesday evening, March 17, in the Civic Auditorium when members of the Auxiliary entertained at dinner. Decorations were carried out in St. Patrick's effect with green carnations and tapers.

During the early evening a short business meeting was held, after which Dr. John B. Jackson presented a review of "Man, the Unknown," by Alexis Carrell. The later evening was spent informally.

Mrs. Rush McNair was chairman of hostesses for the evening, and she was assisted by Mrs. F. T. Andrews, Mrs. Louis Gerstner, Mrs. R. J. Fortner, Three Rivers, Mrs. G. W. Behan, Galesburg, Mrs. I. W. Brown, Mrs. Z. L. Gilding, Vicksburg, and Mrs. W. R. Young, Lawton.

(Mrs. F. M.) WILMA G. DOYLE,
Press Chairman

Saginaw County.—Mrs. F. T. Berberovich was hostess to the Saginaw County Medical Auxiliary at an evening meeting at her home on March 16, thirty-five members attending. Mrs. Milton G. Butler, president, presided. Plans were discussed for the public relations meeting to be held on April 22, when Dr. John Sundwall, of Ann Arbor, is to speak on "The Correct Emphasis on Hygiene and Health."

Contract and auction bridge were enjoyed following the business meeting.

St. Patrick's decorations were used effectively in the dining room, where refreshments were served late in the evening by the hostess, who was assisted by the entertainment committee with Mrs. C. W. Ely, as chairman, Mrs. E. D. McKinnon and Mrs. Henry J. Meyer.

OBITUARY

Dr. Omar J. East

Dr. Omar J. East of Reed City died in Blodgett Hospital in Grand Rapids after a short illness of neuro-meningitis. Dr. East had served as first president of the Reed City Exchange Club and later served two terms as president of the Community Club. He attended the Detroit College of Medicine and graduated in the class of 1899, coming to Reed City in 1912. Along with his practice, Dr. East served the past three years as city health officer. He was president of the Mecosta-Osceola Medical Society at the time of his death. He is survived by his wife, two step-daughters and two brothers. His only son died of pneumonia in France during the World War. Dr. East was sixty-nine years old at the time of his death.

Dr. Carl F. Moll

The medical profession of the state as well as his numerous other friends were shocked to learn of the sudden death of Dr. Carl F. Moll, of Flint. Dr. Moll died in a taxicab in Detroit, May 1, 1936, while on his way to a train to attend the Kentucky Derby. He was born in Wisconsin, sixty-four years ago. He had studied in the Pharmaceutical Department of the University of Wisconsin and in 1899 was graduated from the Saginaw Valley Medical School in Saginaw. Dr. Moll practiced medicine in Kenton, in the Upper Peninsula, until 1917, when he moved to Flint. He was physician and surgeon for the Pere Marquette Railroad and medical examiner for several insurance companies as well as the Bureau of Air Commerce of the Department of Commerce. Dr. Moll was delegate from the Michigan State Medical Society to the House of Delegates of the American Medical Association. In 1930, he was elected President-elect of the Michigan State Medical Society and in 1931 became President.

He leaves his wife, Mrs. Florence Moll, of Phoenix, Ariz.; two sons, Dr. Arthur Moll, of Grand Rapids, and Reginald Moll, with the State Conservation Department at Trout Creek and a sister, Mrs. Fanita Clarke, of New York City.

An editorial tribute will appear in the June number of the MICHIGAN STATE MEDICAL JOURNAL.

MICHIGAN'S DEPARTMENT OF HEALTH

C. C. SLEMONS, M.D., Dr.P.H., Commissioner
LANSING, MICHIGAN

An Unusual Outbreak of Trichinosis

During the second week in February a number of cases of enteritis came to the attention of physicians in Rogers City and vicinity. Several of these cases had symptoms of illness for approximately a week before a physician was called. In all there were four households involved which we shall designate as A, B, C and D. Cases first appeared in household A, which was a few miles away from Rogers City. Soon after these cases came to the attention of a physician the district health officer, Dr. G. B. Moffat, was notified, and Dr. F. C. Forsbeck of the Michigan Department of Health aided Dr. Moffat in his investigation. This is the largest outbreak of trichinosis which has come to the attention of the Michigan Department of Health, of which there is a record.

An investigation revealed the presence of the trichina cases in the other three families, all of which were more or less closely related. Households B, C and D were located within Rogers City. In the beginning, information as obtained from various members of these households was to the effect that there had been no common food or water supply from which all had partaken. Later this was shown to be in error; every member of each household had eaten or obtained sausage at household A in the country, with the exception of a roomer in household C and he was the only one not affected.

Most unusual in this outbreak was the predominance of gastro-intestinal symptoms including severe dysentery with persistent high fever, and relatively few early symptoms other than gastro-enteritis. A little later (about the third week) several of the patients complained of stiffness and soreness in the muscles. It was then that trichinosis was suspected. A specimen of smoked sausage was obtained from household A and sent to the Michigan Department of Health Laboratory where trichinella spirilla was found. To further clinch the diagnosis and epidemiology in this outbreak it is interesting to note that in household C only the father had eaten in the country home of household A but he had taken sausage, and nothing else from there, home to his own family.

There were all told thirty-two cases in the four households. Quite a few of these were mild and none have so far resulted fatally.

A complicating factor at one point in the investigation was the discovery of endamæba histolytica in the feces of one out of five individuals for which such specimens were examined. However, evidence indicated that this was incidental, having no relation to the symptoms in the individual or to the outbreak and that this individual is one of the five per cent, more or less, of the general population who are said to be carriers of this organism.

Trichinosis is often the result of eating smoked or raw sausage. Trichinella spirilla completes its cycle of life in the hog and in the rat. Most hogs obtain the infection by the eating of rats. Man becomes infected by the eating of pork, which has not been well cooked, from such hogs.

The records of the laboratory work done for physicians have become so cumbersome that the State Department of Health has decided to destroy all records over one year old except those for tuberculosis and syphilis. These will be kept five years.

GENERAL NEWS AND ANNOUNCEMENTS

The One Hundred Per Cent Club of the Michigan State Medical Society

1. Ingham County Medical Society
2. Luce County Medical Society
3. Mecosta-Osceola County Medical Society
4. Muskegon County Medical Society
5. Oceana County Medical Society
6. Ontonagon County Medical Society
7. Saginaw County Medical Society
8. Schoolcraft County Medical Society
9. Shiawassee County Medical Society

The above county medical societies have paid dues in full for each and every member of the County and State Medical Societies.

A. M. A. Annual Meeting, Kansas City, May 11 to May 15.

* * *

Seventy-First Annual Meeting of the Michigan State Medical Society, September 21-24.

* * *

American Medical Golfing Association Tournament, Mission Hills CC and Kansas City CC, Monday, May 11, 1936. (36 hole and 18 hole events.)

* * *

The advertisers—without their help, the publication of this excellent JOURNAL would not be possible. Read their message, tell them you have done so, and patronize them wherever possible.

* * *

The American Association for the Study of Goiter will hold its annual meeting in Chicago, June 8, 9, 10. The program of the meeting may be secured by writing Dr. W. Blair Mosser, Kane, Pa.

* * *

The American Association for the Study and Control of Rheumatic Diseases is holding its fifth conference on rheumatic diseases at the Phillips Hotel, 3rd floor, on May 11, at 9 o'clock, in Kansas City.

* * *

Dr. H. A. Luce has been honored by being appointed Chairman of the Reference Committee on Miscellaneous Business, House of Delegates meeting, American Medical Association, Kansas City—1936. Congratulations, Dr. Luce!

* * *

Afflicted child commitments for the month of March, 1936, totaled 1,033, of which 265 were sent to the University of Michigan Hospital. This compares with 1,039 in February, of which 215 were sent to the University Hospital.

* * *

The deadline date for county medical societies which desire to invite the Michigan State Medical Society to hold its 1937 meeting in their community is July 20, 1936. (See the Constitution of the M. S. M. S., Article VII, Section 1.)

* * *

The Annual Clinic of the Alumni of Wayne University College of Medicine will be held in Detroit, Wednesday and Thursday, June 17 and 18. For the detailed program, address 629 Mullett Street, Detroit.

The Radio Bureau of the Wayne County Medical Society is investigating the possibility of presenting dramatized radio programs over Station WWJ. These broadcasts would be similar to those now sponsored by the American Medical Association which have proved so eminently successful.

* * *

The Scientific and Technical Exhibits at the state meeting in Detroit next September will be the largest in the history of the Society. The entire fourth and fifth floors of the Book-Cadillac Hotel have been reserved for this extraordinary display. The Woman's Auxiliary is sponsoring a Hobby Show which will be exhibited also on the fifth floor.

* * *

The Bay County Medical Society's letter of April 15 contained the following notice to the membership: "Will every member kindly provide the Public Relations Committee with a copy of every life insurance blank on which he examines, and note thereon the fee he receives from the company for such examination? DO THIS NOW!"

* * *

Submit your bills in afflicted-crippled children cases. It is deemed advisable for physicians to render (through the hospitals) their bills in afflicted-crippled child cases, under the two state laws, from January 1, 1936, to June 30, 1936, basing same on Schedules A, B, C, and D. This procedure will be helpful in compiling accurate cost data.

* * *

The Brief on socialization of medicine was sent to the printers the last week in April. It will be sent to all physicians in the State during the month of May.

(Editors: The Public Relations Committee suggests that you reprint items from this booklet in your Bulletins.)

* * *

A. M. A. radio broadcasts are now given over the Red network, instead of the Blue, and certain additional stations of the NBC at 5:00 P. M. EST each Tuesday. The title of the program is "Your Health." Listen in on these dramatized broadcasts. They are interesting and well executed. Urge your patients to tune in.

* * *

Honor your Confreres. Some county medical societies hold annual meetings to honor members who have long served the profession and the public. This is most commendable and is recommended to all societies. Why not arrange such a meeting—soon—to honor physicians in your society who have practiced fifty years or more?

* * *

Mercy Hospital of Bay City is publishing a Hospital Staff Bulletin. The first issue, dated April 1, 1936, contained general news notes and announcements, interesting information, an editorial, a Clinical Pathological conference report and a case history. The Staff Editorial Committee is composed of Drs. C. S. Tartar, W. H. Gamble, A. L. Ziliak, and O. F. Jens.

* * *

The PRC and Executive Office are anxious to serve you. Have you invited your State Society Secretary or a member of the State P. R. C. or the Executive Secretary to appear before your county medical society? If not, why not? These men are available and will bring you an interesting message on organized medicine, its problems, and its program of the near future. Contact 2020 Olds Tower, Lansing, 5-3355.

* * *

The Attorney General gave an interesting opinion on January 16, 1936, relative to The Detroit Conservatory of Music, the property of which is used solely for the purposes of its incorporation as

an educational institution. The Attorney General ruled it is exempt from general taxation under subdivision four, Section 7 of Section 3395, Compiled Laws of 1929, as amended. This opinion undoubtedly would apply to county medical societies holding real estate.

* * *

"George" was the title of Dr. R. C. Jamieson's President's Paper which was published in the *Detroit Medical News* of April 13. "George" is pictured as the trustworthy, dependable, and honorable gentleman who is found in every organization and to whom too many members refer all the hard work. Dr. Jamieson's essay was reprinted in full by the New York State Medical Society's Committee on Economics which used it as the basis of its April Bulletin.

* * *

The Northern Tri-State Medical Society held its annual meeting for 1936 at Fort Wayne. The annual election of officers resulted as follows: President, Dr. W. H. Marshall of Flint; vice president, Dr. G. E. Jones of Lima, Ohio; secretary, Dr. R. H. Elrod of Toledo. The following are counsellors for the ensuing year, Dr. J. N. Kelly of Laporte, Dr. L. T. Rawles of Fort Wayne, Dr. W. M. Donald of Detroit, and Dr. Bert Hibbard of Lima, Ohio. In 1937, the annual meeting will be held at Jackson.

* * *

Each new member of the Michigan Medical Society will receive in future a copy of the Constitution and By-Laws of the Michigan State Medical Society, as well as information on the activities of organized medicine. It is respectfully recommended that each county medical society furnish a copy of its constitution and by-laws to all new members, and if possible a list of the advantages of membership in the particular county medical society. This will aid to sustain the enthusiasm of new members and make them workers from the very beginning.

* * *

Special train service to Kansas City: The C. M. St. P. & P. Railroad announces that the "Southwest Limited," a de luxe, air-conditioned train, will leave Chicago from the Union Station daily beginning Sunday, May 10, at 7:30 P. M., arriving in Kansas City at 8:00 A. M. This train will carry special sleeping cars for the use of members of the American Medical Association who are attending the Annual Session in Kansas City. For reservations please communicate with Mr. V. L. Hitzfeld, 711, 100 West Monroe St., Chicago.

* * *

The Seventy-first Annual Meeting of the Michigan State Medical Society will be held at the Book-Cadillac Hotel, Detroit, September 21, 22, 23, and 24, 1936. The tentative schedule of events is as follows:

Golf at the Detroit Golf Club will be part of the entertainment on the occasion of the Annual Meeting of the M. S. M. S. in Detroit. The golfers will congregate on Tuesday afternoon, September 22. After 18 holes of play, the golfers' banquet will be held in the Detroit Golf Clubhouse at 6:30 P. M. The President's Trophy and other valuable prizes will be up for competition.

The Detroit Committee in charge of this entertainment is composed of Dr. C. D. Brooks, Chairman, and Drs. Donald V. Clark, R. C. Leacock, L. J. Morand, L. S. Potter, and Walter Wilson.

* * *

Help the Probate Judge. Medical filter boards in the various counties have been requested by the Michigan Probate Judge Association to present, after each meeting of the Board, a detailed medical history of each case reviewed, with a diagnosis and reasons for approval or rejection *explained in lay English*, and with full recommendations. The P. R. C. recommends this coöperation on your part. The Judges will appreciate it. The P. R. C. recommends multiple medical filter boards (composed of three or five physicians), so that the majority opinion of the board may decide on the urgency and necessity of the cases presented to it.

* * *

The Bulletin of the Genesee County Medical Society is a complete monthly publication of all society activities. The format and material are excellent. The April issue, prepared by Dr. George Anthony, contained information and statistics on relief medicine, an article on coöperation between practicing physicians and health agencies, an historical sketch of early medicine in Genesee County, and many interesting news notes. The Editor is Dr. S. M. Gelenger. He is assisted by Drs. George Anthony, G. R. Backus, D. R. Brasie, T. S. Conover, H. C. Crane, G. E. Drewyer, S. T. Flynn, L. A. Lambert, R. S. Morrish, O. C. Pratz, C. J. Scavarda, C. K. Stroup. The Business Manager is C. C. D. French.

* * *

Has a probate judge the authority to enter into an agreement with his county medical society in giving aid to afflicted and crippled children? Attorney General David H. Crowley recently rendered an opinion from which the following is quoted:

"We are of the opinion that if a probate judge considers it advisable to discuss such cases with the County Medical Society this is entirely proper. In fact, it should be noted that the afflicted children's act specifically provides that the probate judge may make such investigation as he may deem necessary. We see no reason why the probate judge should not consult his local Medical Society if he considers it advisable so to do but he cannot bind himself to follow their advice."

Time	Monday, Sept. 21	Tuesday, Sept. 22	Wednesday, Sept. 23	Thursday, Sept. 24
9:00 A. M. to 12:30 P. M.	Registration First Session House of Delegates	Registration Third Session House of Delegates	Registration First Clinical Session	Second Clinical Session.
12:30 P. M. to 2:00 P. M.	Lunch	Lunch	Lunch	Lunch
2:00 P. M. to 5:30 P. M.	Second Session House of Delegates	Golf at Detroit Golf Club or Baseball at Navin Field	Second General Session	Third General Session
5:30 P. M. to 8:00 P. M.	Dinner	Golfers' Banquet, Detroit Golf Club	Secretaries' Conference and Dinner	
8:00 P. M. to 10:00 P. M.	House of Delegates Committee Work	First General Session and Smoker	President's Night, and Biddle Lecture	

The Attorney General held on February 12, 1936, that patients in psychopathic hospitals may be transferred by the Director of the Welfare Department to a county detention home where the patient is eligible in the first instance for admission and the home consents to such transfer. At the present time the State plants are not adequate to house and care for the mentally afflicted. It was, perhaps, with this in mind that the Legislature authorized the counties to establish detention homes. To transfer such persons for their own betterment to homes to which they may have been legally committed in the first instance surely does not violate any of their legal rights.

* * *

County Medical Society Elections and By-Laws.

The Constitution and By-laws of every county medical society should coincide in important features with those of the M. S. M. S. especially in sections dealing with membership requirements, with rules and procedure of ethics, and with dates of annual meetings. The P. R. C. recommends that county medical societies hold their annual meetings with *election of officers and delegates* in the Autumn, shortly after the Annual Meeting of the M. S. M. S.; this will aid the Speaker to organize your House of Delegates practically one year in advance, and permit committee members ample time to study problems and present matured recommendations at the next session of the House of Delegates.

* * *

Bureau of Information and Speakers Bureau.

A Bureau of Information is being developed by the P. R. C. of the M. S. M. S. This progressive program of public information will not only aid the press and the people, but will help to make strong friends for the organized medical profession and the individual practitioners of this State. The Bureau's work will eventually necessitate the creation in all county medical societies of Speakers' Bureaus, bringing the physician in closer contact with groups of laymen. Your county medical society must do its part to inform the public on medical matters of scientific and social import. Every member must do his share in his own office, in social gatherings and before lay groups. Know the Truth, and spread your knowledge.

* * *

Judge Clark E. Higbee of Grand Rapids writes a typical letter of satisfaction for the medical profession's work in creating the filter system and laboring hard in this emergency.

Dr. L. Fernald Foster, Chairman,
Public Relations Committee,
Michigan State Medical Society,
Lansing, Michigan.

Dear Doctor Foster:

Your letter regarding the "Filter System" is received. In answer to your questions, I say:

1. The medical profession in Kent County is coöperating fully.
2. The hospitals are also coöperating fully.
3. No problems have arisen, etc.
4. The weak point of the Filter System, so-called, is that it depends wholly on the altruistic impulses of the medical profession.

The success of the Filter System in Kent County is due in no small part to the dynamic leadership of Dr. A. B. Smith.

Sincerely,
(Signed) CLARK E. HIGBEE,
Judge of Probate, Kent County.

March 18, 1936.

* * *

Available to your county medical society: On tour throughout Michigan, the traveling health exhibit of the Michigan Tuberculosis Association was

recently awarded highest honors by the American Public Health Association. It was shown in Wisconsin in 1935, being viewed in seven months by more than 75,000 people.

The big and attractive display is transported from one community to another in a fourteen foot, specially constructed trailer. It consists of more than thirty panels, photographs, paintings, drawings, charts and models, all of which deal with the nature, cause, prevention and treatment of tuberculosis.

In conjunction with the exhibit, the Association shows a talking picture entitled, "Contacts." The film portrays the ease with which tuberculosis spreads from one person to another, and follows, through the medium of a story replete with human interest, with a demonstration of the modern weapons that are being used to combat the disease.

Short talks by members of the county medical society will be part of the educational program.

* * *

The Alumni Association of Wayne University will present a clinic, June 17 and 18, 1936, as follows:

Wednesday morning the program at the College Auditorium will include:

8:30—Clinical Pathological Conference—Dr. Osborne A. Brines

9:30—Peptic Ulcer—Dr. Frederick G. Buesser

10:00—Surgery of the Biliary Tract—Dr. Clark D. Brooks

10:30—Common Dermatological Conditions—Dr. Robert C. Jamieson

11-12—Dr. William J. Stapleton and Dr. Raymond B. Allen—Subject to be announced.

Wednesday afternoon, scientific exhibits by the Medical School Faculty will be shown. Entertainment—Baseball, Detroit *vs.* Washington.

Wednesday evening will be devoted to reunion dinners of classes of 1931, 1926, 1921, 1916, 1911, 1906, 1901, 1896, and 1891.

Thursday morning—Clinical programs will be given in the Detroit Hospitals and Thursday afternoon at one o'clock there will be an inspection tour of the Parke, Davis and Company plant followed by a boat ride and the annual meeting on the Steamer Put-in-Bay.

* * *

Wayne County Medical Society Delegates to the Michigan State Medical Society for 1936 are:

Doctors Jos. H. Andries, D. A. Bailey, W. D. Barrett, A. P. Biddle, A. W. Blaine, D. S. Brachman, A. H. Bracken, W. N. Braley, C. F. Brunk, F. B. Burke, Wm. J. Cassidy, A. E. Catherwood, John L. Chester, Wm. R. Clinton, G. L. Coan, Fred H. Cole, B. L. Connolly, H. P. Cushman, C. R. Davis, Harry F. Dibble, Edward Dowdle, Chas. E. Dutches, Douglas Donald, Bert Estabrook, S. A. Flaherty, Daniel P. Foster, L. J. Gariepy, L. O. Geib, S. E. Gould, T. K. Gruber, W. B. Harm, F. W. Hartman, C. K. Hasley, Jas. W. Hawkins, L. T. Henderson, L. J. Hirschman, M. H. Hoffmann, Wm. Honor, J. A. Hookey, S. W. Insley, R. C. Jamieson, A. F. Jennings, Joseph A. Kasper, T. F. Keating, F. A. Kelly, Chas. S. Kennedy, F. C. Kidner, Frank J. Kilroy, E. G. Krieg, Harold J. Kullman, P. L. Ledwidge, J. H. Lewis, H. A. Luce, H. C. Mack, G. L. McClellan, F. T. McCormick, Allan W. McDonald, Angus McLean, Mark McQuiggan, H. L. Morris, H. W. Peirce, Ralph H. Pino, H. W. Plaggemeyer, Carl Ratigan, Wm. S. Reveno, John B. Rieger, J. M. Robb, J. R. Rupp, C. E. Simpson, E. D. Spalding, F. W. Stafford, Wm. J. Stapleton, Jr., David I. Sugar, C. E. Umphrey, V. L. Vanduzen, R. V. Walker, A. H. Whittaker, E. R. Witter, Wm. P. Woodworth, H. W. Yates.



The names of the orchestra members reading from left to right are: L. R. Kaminski, D. D. Mailloux, Leon Tottenberg, E. J. Buttrum, Ezra Lipkin, Samuel Jacobson, John Bryce, Robert Braunsdorf, Samuel Katz, Frank MacKenzie, Frank Octavoc, Raphael Altman, Marcelli Annessa, H. C. Galantowicz, Hugo Segal, Max Beitman, G. R. Spaulding, George Burr, George H. Palmerlee, C. Eaton, Harold Kahn, G. Ash, Georges Miquelle, A. Cooper, Saul Lewis, Samuel J. Lewis, Sam Weisberg, John Van Emmerick, Arthur Hammond, Eugene Osius, Gerald Wilson, Paul Walker, B. Kalmbach, P. Hyde, Fred W. Hyde, Jr., William Woodworth, Fred Hyde, Joseph Grober, L. Douglass, Edward Valentini.

Detroit Doctors' Symphony Orchestra

Medicine and Music, two arts originally inseparable, are closely associated even today, and it is with a pardonable measure of pride that the Wayne County Medical Society points to its Symphonic Orchestra of fifty pieces and its Glee Club of twenty-four voices. The society is appreciative of the musical abilities of the orchestra and glee club, adding something new to the cultural life of Detroit. Monday evening, March 30, the entertainment committee of the Wayne County Medical Society presented these two organizations in their second annual concert in the large auditorium of the Detroit Institute of Arts. A capacity audience greeted the program with marked enthusiasm. The orchestra presented works from Van Suppe, Sinigaglia, Debussy, German, Gluck and Herold, while the glee club rendered works of Oley Speaks, Drummond, Huhn and Purcell.

The Glee Club was organized two years ago and has progressed under the able guidance of Arthur Searle, Director of High School Music for the Detroit Department of Education and organist at Christ Church. The Society has enjoyed the Glee Club's pleasing programs at several of the Dramatic Nights. Rehearsals are held once a week throughout the winter season. Mr. Searle, unfortunately, was unable to direct the glee club at Monday night's program, the guest conductor being Howard A. Love, organist of St. Mark's Church and director of the Eastern High School Chorus. Dr. Leo Rennell, president of the Glee Club, is assisted by Dr. Harry A. Pearse, vice president; Dr. John Salowich, secretary; and Dr. Paul Brownell, librarian.

The Orchestra, the largest of its kind in America, being composed entirely of doctors, numbers fifty pieces. It was organized in January, 1935, with a membership of twelve under the direction of Georges Miquelle, virtuoso cellist of the Detroit Symphony Orchestra. They made their first public appearance in April, 1935, with a personnel of twenty-eight. The growth was rapid and in November, 1935, with forty units, played before the International Congress of the Interstate Medical Assembly. These physicians and surgeons expressed amazement at the industry and talent of the Wayne County Medical Society. Dr. Frank MacKenzie is president of the Symphony Orchestra of the Society; Dr. Wm. P. Woodworth is vice president; Dr. Arthur Hammond, treasurer; Dr. Jack Agins, secretary; and assisting Mr. Miquelle as concert master is Dr. Raphael Altman.

A non-professional organization could not have climbed so rapidly nor to such heights of success as the Orchestra were it not for its director, the brilliant virtuoso cellist, Georges Miquelle. He was born in Lille, in the north of France, receiving his musical education in Paris. He saw service with his country and following the armistice came to the United States to be solo cellist with the Boston Symphony "Pop" concerts. Mr. Miquelle later joined the New York Chamber Music Society and toured the continent with Melba, Schipa and others, joining the Detroit Symphony Orchestra in 1925. Mr. Miquelle was made an honorary member of the Wayne County Medical Society at the performance, March 30, as a mark of appreciation on the part of the society.

The personnel of the Orchestra is as follows:

Georges Miquelle, Orchestra Conductor; Raphael Altman, Concert Master.

Violins—H. C. Galantowicz, C. R. Davis, Samuel Jacobson, L. R. Kaminski, D. D. Mailloux, Leon Rottenberg, Marcelli Annessa, Jack Agins, Robert Braunsdorf, John Bryce, E. J. Buttrum, Samuel Katz, Ezra Lipkin, Frank Octavoc, Hugo Segal.

Cello—Eugene A. Osius, Wm. P. Woodworth, Joseph Grober, Edward Valentini, B. Kalmbach.

String Bass—Leon H. Douglass.

Piano—Frank MacKenzie.

Trumpets—Arthur E. Hammond, Gerald Wilson, Paul Walker, P. Hyde.

Flute—George H. Palmerlee, G. Ash, C. Eaton.

Oboe—Samuel J. Lewis, John Van Emmerick.

Viola—Max Beitman.

Clarinets—G. C. Burr, Ralph Ballard, E. M. McAfee.

Percussionists—Harold C. Kahn, G. R. Spaulding.

Trombone—Fred W. Hyde, Fred W. Hyde, Jr.

Bassoon—Saul Lewis

French Horn—Samuel B. Weisberg.

The Glee Club members include:

Director—Arthur Searle.

Accompanist—Frank MacKenzie.

First Tenor—E. J. Hammer, H. Rezanka, R. W. Lignell, H. Crick, G. Kleppinger.

Second Tenor—L. Galdonyi, M. B. Sofen, J. M. Thompson, G. Gua, C. Waszak.

Baritone—L. P. Rennell, H. A. Pearse, J. N. Salowich, F. T. Munson, V. E. Nelson, C. O'Leary.

Bass—C. Fox, F. T. McCormick, P. Brownell, R. W. Hodges, W. Curtiss, J. T. Barker.

Governor Frank D. Fitzgerald has appointed Dr. S. W. Insley, Detroit, as representative of the Michigan State Medical Society on the Special Commission to study welfare laws and activities. Other members on this Commission include: Judge Clark E. Higbee, Grand Rapids; Prof. Arthur F. Dunham, University of Michigan, Detroit; Arthur F. Jacques, Marquette; Clarence E. Weiss, Detroit; Dr. Charles D. Pullen, Mt. Pleasant; Sen. Leon D. Case, Water-vliet; Oliver Gibbs, Rochester; Fred L. Woodworth, Lansing; Dr. Wm. Haber, Lansing; Wm. J. Thomas, Grand Rapids; R. N. Ashley, D.O., Wyandotte; Wm. F. Gallagher, Owosso; Harold E. Smith, Ann Arbor; Wm. J. Norton, Detroit; Harry Tallifero, Grand Rapids; Mrs. Eleanor Bulkley, Detroit, and Mrs. Leven-Ruben, Detroit. Mr. Smith is chairman.

* * *

The Filter System, created out of the suggestion of the Michigan State Medical Society on October 30, 1935, to limit tax-supported medical care in this state to the worthy poor, has been very successful in many counties, judging by the enthusiastic letters received from probate judges in these areas. The glowing accounts of the splendid cooperative work of physicians is the subject of comment from Judge Ruth Thompson of Muskegon, Michigan, President of the Michigan Association of Probate Judges:

L. Fernald Foster, M.D.,
Chairman, Public Relations Committee,
Michigan State Medical Society,
Lansing, Michigan.

Dear Doctor Foster:

I have your recent letter of inquiry in relation to the filter system recently inaugurated by the probate courts and several county medical societies throughout the State of Michigan. Replying thereto, I am unable to speak for all of the counties, but I am assured that in all but a very few of the counties it is working out very well. I can think of three judges who are having a little difficulty, but I think their troubles can be ironed out as soon as their county medical society becomes more thoroughly familiar with the situation.

There was a great deal of misunderstanding in Muskegon County and it seemed almost impossible to iron out our difficulties. However, as soon as a filter committee was appointed and met with me and my County Welfare Agent and all of us had the facts thoroughly in hand, our troubles gradually began to disappear. Under our plan, the amount of cases hospitalized as public patients has been reduced just fifty per cent. This has been helpful to the public at large, the physicians, and the hospitals. Where patients have been able to guarantee payment of not less than \$4.00 a month, the hospitals and physicians have been happy to accept them as private patients instead of public patients. In many instances we have found people who have been unwilling to sign a contract, and they have been dismissed without further consideration. I feel very sure that no person has been allowed to suffer as a result of the watchful service rendered by the filter committee in cooperation with this Court.

It would be pleasing to me to know that the physicians of this State could soon go back on at least a part-paying schedule for their services, and I am sure that time is not far off. In the meantime, I am sure the probate judges of the State appreciate the cooperation of the physicians and the hospitals in this delicate situation. I, personally, am much indebted to the officers of the State Medical Society for their splendid attitude and willingness to cooperate in all matters pertaining to the hospitalization of afflicted children.

Yours very truly,

(Signed) RUTH THOMPSON,
Judge of Probate, Muskegon County.

April 7, 1936.

* * *

Social Security Funds to Michigan

1. Health Department.—To establish and augment county health units, which phase is in charge of the U. S. Public Health Service, the sum of \$212,095 on an annual basis will be received by the Michigan Department of Health. Counties contemplating the establishment of full-time county health units should consider the advantage of such organizations as educational and administrative units, but should set up definite safeguards—in advance—against their becoming *practicing* units. Under

Michigan laws, the practice of medicine is limited to physicians as individuals, and cannot be taken over by corporations or units. The patient-family physician relationship should be kept inviolate.

The maternal and child health phase, under the direction of the U. S. Children's Bureau, will be administered by the Michigan Department of Health, with Dr. Lillian Smith in immediate charge. The sum of \$89,000, on an annual basis, has been allocated for education to prospective mothers, continuing through until the born baby is at least six weeks old, and also for the purpose of instruction in the schools in child care, lay information, and, later on, studies in maternal health and refresher courses for physicians.

2. Crippled children.—The sum of \$88,800.00 on an annual basis has been allocated to the Michigan Crippled Children Commission for hospitalization of crippled children and also for administrative costs.

3. Welfare.—The sum of \$38,000 has been set aside for child welfare services in Michigan. The laws covering the Michigan Welfare Department qualify it up to that amount; to obtain further grants, legislation is necessary for the dependent child, maternal and club health services.

Old age pensions.—Approximately \$2,163,000 on an annual basis will be allocated to the old age pension department of the Welfare Office. The money received is based on the state's matching dollar for dollar with the federal government. The sum received for February and March, 1936, raised the pension per person per month from \$11.30 to \$16.50. The old age pension load has risen to approximately 23,000 persons.

* * *

A regional meeting of the Michigan Branch of the Medical Women's National Association and the Medical Women of Grand Rapids was held at the Morton Hotel, Grand Rapids, April 4, 1936, 7 p. m. This meeting was attended by women physicians from Battle Creek, Bay City, Big Rapids, Chicago, Detroit, Grand Rapids, Kalamazoo, Lansing, Manistee and Paw-Paw.

Dr. Lucille Grant, Grand Rapids, toastmistress, spoke about the importance of such meetings.

Dr. Bertha L. Selmon, Battle Creek, president of the Michigan Branch of the M. W. N. A., in speaking about the History of Michigan Medical Women, said: History is always in the making. Medical women in Michigan are building daily the finest type of history that is possible for women. Very little of the splendid work done by the women physicians is recorded. Dr. Selmon requested the women physicians present to assist in collecting for record the story of their colleagues as well as their own personal story.

Dr. Saba Kessler, secretary-treasurer of the Michigan Branch of the M. W. N. A., gave a report of the progress made by the Michigan Branch to date.

Dr. Kathryn Bryan, Manistee, stressed the conditions of overcrowding in the mental hospitals and the handicaps it creates in the treatment of mental cases. Many times weeks and sometimes months are needed to get a patient into our hospitals. The admission of mental patients to hospitals on voluntary and temporary commitments was urged. The respective specific law in Michigan should also be changed so that admissions would become easier and would therefore keep sick people out of the courts as much as possible.

Dr. Bertha Van Hoosen, Chicago, Professor of Obstetrics and Gynecology at the Loyola University, the only woman physician who is head of an obstetric department in a coeducational institution, spoke on "Maternal Mortality and the Abortion Question." Dr. Van Hoosen also mentioned her interesting experiences on her four travels to Europe

as delegate to the meetings of the Medical Women's International Association.

Plans were laid for the annual meeting of the Medical Women's National Association in Kansas City in conjunction with the annual meeting of the American Medical Association.

* * *

The Ingham County Medical Society Annual Clinic was a very successful meeting held at the Olds Hotel, on April 23. Over 300 registered for the afternoon lectures given by Dr. Louis G. Herrmann, University of Cincinnati, Ohio; Dr. Loyal Davis, Northwestern University, Chicago; Dr. James G. Carr, Northwestern, Chicago; and Dr. Russell L. Haden, Cleveland Clinic, Cleveland, Ohio. The banquet was attended by 250 physicians who heard Dr. Clay Ray Murray of Columbia University speak on "The Ambulatory Treatment of Fractures." The officers of the Ingham County Medical Society are: Dr. Earl I. Carr, President; Dr. Milton S. Shaw, President-elect; Dr. Theodore I. Bauer, Treasurer, and Dr. Russell L. Finch, Secretary.

The Program Committee, in charge of the Clinic, was: Dr. R. J. Himmelberger, Chairman; Drs. C. S. Davenport, J. F. Sander, W. H. Welch, C. D. Keim, A. E. Owen, and L. L. Henry.

A partial list of those attending the Clinic and dinner follows:

Bay County.—Dr. J. L. Hess, Bay City.
Branch County.—Dr. R. W. McLarion, Ionia.
Calhoun County.—Dr. J. E. Rosenfeld, Dr. George W. Slogle, Dr. E. L. Eggleston, Dr. L. P. Shipp, and Dr. B. M. Overholt, all of Battle Creek; Dr. Ara D. Sharp, and Dr. Clifford B. Taylor, Albion.
Clinton County.—Dr. Thomas Y. Ho, Dr. C. T. Foo, Dr. F. E. Linton, and Dr. S. R. Russell, all of St. Johns; Dr. Wm. B. McWilliams, Maple Rapids; Dr. Frank D. Richards, Dewitt.
Eaton County.—Dr. E. F. Imthun and Dr. A. G. Stanka, Grand Lodge; Dr. Bert Van Ark, Eaton Rapids.
Genesee County.—Dr. Glenn E. Drewery, Dr. Arthur H. Kretschmar, Dr. J. W. Evers, Dr. R. Brasie, and Dr. Leon M. Bogart, all of Flint.
Gratiot-Isabella-Clare.—Dr. K. Hammerberg, Clare; Dr. R. A. Wilcox, Alma; Dr. B. C. Hall, Pompeii; Dr. O. R. Johnson and Dr. Wm. Harrigan, Mt. Pleasant.
Ionia-Montcalm County.—Dr. Roy C. Lintner, Ionia; Dr. R. W. Fuller, Crystal.
Jackson County.—Dr. W. L. Foust, Grass Lake; Dr. L. B. Lawton and Dr. R. H. Nichols, Leslie; Dr. Corwin S. Clarke, Dr. H. W. Porter, Dr. G. R. Bullen, Dr. L. L. Stewart, Dr. J. W. Townsend, Dr. E. H. Corley, Dr. Jos. J. O'Meara, Dr. C. D. Munro, Dr. Jason B. Meads, Dr. C. E. DeMay, Dr. W. H. Enders, Dr. G. C. Hicks, Dr. E. S. Peterson, Dr. Don F. Kudner, Dr. T. E. Schmidt, Dr. H. C. Hurley, Dr. N. D. Wilson, all of Jackson.
Kalamazoo Academy.—Dr. S. M. Riley, Gobles; Dr. O. D. Hudnutt, Plainwell; Dr. G. M. Behan, Galesburg; Dr. A. E. Henwood, Dr. John R. MacGregor, Dr. Sherman E. Andrews, Dr. R. H. Lambert, Dr. Homer Stryker, Dr. F. T. Andrews, Dr. Bernard J. Dowd, Dr. Alton E. Pullon, Dr. Leo E. Westcott, Dr. L. H. Stewart, Dr. Leo J. Crum, all of Kalamazoo.
Kent County.—Dr. G. DeMaagd, Rockford; Dr. Jerome E. Webber, Dr. W. G. Colvin, Dr. Joseph F. Whinery, Dr. Harry Loeffers, Dr. James S. Brotherhood, Dr. Richard J. DeMol, Dr. Daniel DeVries, Dr. John Fletcher Failing, Dr. Frank A. Boet, Dr. O. H. Gillett, Dr. E. Schemer, Dr. J. D. Miller, Dr. G. F. Lamb, all of Grand Rapids.
Lenawee County.—Dr. Howard H. Heffron, Adrian; Dr. F. J. McCue, Hudson.
Livingston County.—Dr. H. G. Huntington, Dr. H. C. Hill, Dr. H. L. Sigler, all of Howell; Dr. B. H. Glenn, Fowlerville.
Manistee County.—Dr. William H. Meade, Manistee.
Monroe County.—Dr. Vincent L. Barker and Dr. Dean C. Denman, Monroe.
Muskegon County.—Dr. Helen S. Barnard, Muskegon; Dr. Martha H. Goltz, Montague.
Newaygo County.—Dr. Oscar D. Stryker, Fremont.
Oakland County.—Dr. F. D. German, Pontiac.
O. R. C. O. R. O. Counties.—Dr. Stanley A. Stealy, Grayling.
Ottawa County.—Dr. Iva Lickly, Grand Haven; Dr. D. C. Bloemendaal and Dr. G. J. Kemme, Zeeland.
Saginaw County.—Dr. C. Kirchegeorg, Frankenmuth.
St. Clair County.—Dr. Jacob H. Rinley, Port Huron; Dr. Howard R. Johnson, Capac.
Shiawassee County.—Dr. I. W. Greene, Owosso; Dr. L. M. Cudworth, Perry.

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column and this will be deemed by us a full compensation to those sending them. A selection will be made for review, as expedient.

SYNOPSIS OF CLINICAL LABORATORY METHODS.

By W. E. Bray, B.A., M.D., Professor of Clinical Pathology, University of Virginia; Director of Clinical Laboratories, University of Virginia Hospital. St. Louis: The C. V. Mosby Company, 1936.

MEDICAL MYCOLOGY; FUNGUS DISEASES OF MEN AND OTHER MAMMALS.

By Carroll William Dodge, Ph.D. Mycologist, Missouri Botanical Garden, Professor, Henry Shaw School of Botany, Washington University. St. Louis: The C. V. Mosby Company.

ABORTION, SPONTANEOUS AND INDUCED; MEDICAL AND SOCIAL ASPECTS.

By Frederick J. Tausig, M.D., F.A.C.S., Professor of Clinical Obstetrics and Clinical Gynecology, Washington University School of Medicine, St. Louis. St. Louis: The C. V. Mosby Company, 1936.

THE EXAMINATION OF THE PATIENT AND SYMPTOMATIC DIAGNOSIS.

By John Watts Murray, M.D. Second Edition. St. Louis; The C. V. Mosby Company, 1936.

RECENT ADVANCES IN MEDICINE; CLINICAL LABORATORY THERAPEUTICS.

By G. E. Beaumont, M.A., D.M.(Oxon.), F.R.C.P., D.P.H.(Lond.), Physician with charge of Out-patients, Middlesex Hospital; Physician to the Hospital for Consumption and Diseases of the Chest, Brompton; Medical Tutor, Middlesex Hospital Medical School; Sometime Radcliffe Travelling Fellow, University of Oxford; and E. C. Dodds, M.V.O., D.Sc., Ph.D., M.D., F.R.C.P., Courtauld Professor of Biochemistry in the University of London; Director of Courtauld Institute of Biochemistry, Middlesex Hospital; Pathologist to the Royal National Orthopaedic Hospital. Eighth edition, 46 illustrations. Philadelphia: P. Blakiston's Son & Co. Inc., 1936.

LOBAR PNEUMONIA AND SERUM THERAPY.

By Frederick T. Lord, M.D., Clinical Professor of Medicine, Emeritus, Harvard Medical School; Member of the Board of Consultation, Massachusetts General Hospital; and Member of Massachusetts Advisory Committee on Pneumonia; and Roderick Heffron, M.D., Field Director, Pneumonia Study and Service, Massachusetts Department of Public Health. New York: The Commonwealth Fund. London: Humphrey Milford: Oxford University Press, 1936.

ABORTION: SPONTANEOUS AND INDUCED MEDICAL AND SOCIAL ASPECTS.

By Fredrick J. Tausig, M.D., F.A.C.S., Professor of Clinical Obstetrics and Clinical Gynecology, Washington University School of Medicine, St. Louis. Cloth, \$7.50. 536 pages. Illustrated. St. Louis: The C. V. Mosby Company, 1936.

This is a most comprehensive book dealing with the abortion problem. The author begins with the history of abortion and the subject of abortion in animals, following which the purely medical and surgical aspects of the subject are fully treated. The section which deals with the social problems in connection with abortion is very interesting and well worth careful consideration. The book is well written of should be of timely interest to physicians and sociologists, and the section which deals with various abortion laws should command the attention of the legal profession.

BEWILDERED PATIENT.

By Marian Staats Newcomer, M.D. 323 pages. Illus. Price \$1.75. Boston and New York: Hale, Cushman & Flint, 1936.

This work shows such an understanding of human values from both the scientific and philosophical viewpoint that it might be used as a text-book in our schools if the curriculum were not now so crowded.

The author's style is so clear and convincing that he who reads can readily understand how necessary it is not only to consult a physician but to

be most discerning in choosing one of the highest repute. From the moment that the reader opens this book he is convinced that Dr. Newcomer is competent to direct the right kind of treatment whether it be medical or whether it be a mental readjustment. The chapters: "What a Physician Can Do For You and Your Family," "How to Plan the Family Nutrition," and "Choosing Your Physician" contain such a wealth of vital information that no family can afford to be without this book.

DENTAL ROENTGENOLOGY. By Leroy M. Ennis, D.D.S., Assistant Professor of Roentgenology in the Thomas W. Evans Museum and Dental Institute, School of Dentistry, University of Pennsylvania; Instructor in Dental Roentgenology in the Graduate School of Medicine, University of Pennsylvania; Lieutenant Commander, U. S. Naval Reserve. Second edition, enlarged and thoroughly revised, published 1936. Octavo, 351 pages, illustrated with 693 engravings. Cloth, \$6.50, net. Philadelphia: Lea & Febiger, 1936.

This book covers the entire field of x-ray diagnosis as it pertains to the teeth. It takes up x-ray tubes, roentgen-ray dermatosis, intra- and extra-oral exposure technique, localization and root fragments, chemistry and technique of development, normal anatomical landmarks as seen in radiographs and radiological interpretation of dental pathology. The work is profusely illustrated with 693 reproductions of photographs and radiographs showing many examples of conditions described in the text. This book is intended for practitioners and students in acquiring an effective technique in the exposure and development of roentgen films and to aid in accurate interpretations.

A TEXTBOOK OF SURGERY. By American Authors. Edited by Frederick Christopher, B.S., M.D., F.A.C.S., Associate Professor of Surgery at Northwestern University Medical School; Chief Surgeon Evanston (Illinois) Hospital. 1,608 pages with 1,349 illustrations on 730 figures. Cloth, \$10.00 net. Philadelphia and London: W. B. Saunders Company, 1936.

This is a work of composite authorship. There are 185 collaborators chosen pretty well from all over the United States. Michigan is represented by three, namely, Dr. John Alexander, Dr. F. A. Collier and Dr. Max M. Peet of the University of Michigan Medical School. The author declares in his preface that the dominant plan of his textbook is to give the student a concise presentation of surgery which is characterized by the maximum authority. From a survey of the array of collaborators, he appears to have accomplished his purpose. The science and art of surgery have advanced to such a degree that it is impossible to embrace the subject under single authorship. This is not to say that there are no surgeries under single authorship of great merit. The general subject of surgery covers many highly specialized fields within it that are best handled by specialists in these departments. This very fact makes an adequate review of a work of composite authorship difficult inasmuch as the reviewer has his preferences. We therefore, single out the department on fractures.

This chapter contains an introduction dealing with pathology and repair. The writer goes on to say, "The consensus of opinion today, based upon both clinical and experimental evidence, supports the view that the repair process following fracture is a *local* phenomenon. The general state of the patient's health, his age (with the exception of infancy and childhood), the existence of acute or chronic *general* disease (lues, arteriosclerosis, nephritis, tuberculosis, arthritis, cardiac disease, etc., the existence of generalized metabolic disturbances (osteomalacia, rachitis, scurvy, diabetes, etc.), none of these has any proved effect on the rate or degree of the healing of a fracture." This statement will come as a

surprise and perhaps be challenged by many who look to any one of the conditions mentioned as the probable cause of non- or delayed union. However, taken as a whole, this is one of the most satisfactory accounts of the pathology of repair of fracture we have seen. Other chapters deal with fractures in the various regions of the body. Nearly two hundred pages are devoted to the subject of fractures and dislocations.

Dr. James T. Case, formerly of Battle Creek has contributed an interesting chapter on diagnostic and therapeutic roentgenology in surgery. This section deals with principles rather than specific cases since the best results come only when the details are left to the roentgenologist. The entire work is as exhaustive in its treatment of the various subjects as we have ever seen in a single volume. Yet the volume is not bulky. The general practitioner as well as the surgeon will find this work of inestimable value.

AN INDEX OF DIFFERENTIAL DIAGNOSIS OF MAIN SYMPTOMS. By various writers. Edited by Herbert French, C.V.O., C.B.E., M.A., M.D.(Oxon.), F.R.C.P. (Lond.). Consulting physician to Guy's Hospital; late Physician to H. M. Household. Fifth edition, with seven hundred and forty-two illustrations of which one hundred and ninety-six are colored. Price, \$16.00. Baltimore: William Wood and Company, 1936.

This work has gone through five editions since it was first published in 1912. This fact alone is evidence that it has occupied an important place in the doctor's library. The original purpose has been maintained, namely to be a help in arriving at a correct diagnosis in cases in which one or more symptoms are pronounced and yet the real nature of the malady is not immediately clear. The book covers the entire field of medicine, surgery, gynecology, ophthalmology, dermatology, and neurology. Its contributors are among the ablest and most outstanding physicians and surgeons in Great Britain. Among the notable features of the work are the fine illustrations, many of them in colors. The index consists of 220 pages, four columns to a page. It is not the usual type of index. Under appetite abnormal, we have listed forty-six sub-entries of conditions in which an abnormal appetite may be found, and so on. The authors do not include treatment except where treatment may be advantageous in determining the diagnosis. The work is essentially a desk book to be used in all cases in which the diagnosis is not readily apparent. It will be found unique in its masterful treatment of the subject.

MEDICAL MYCOLOGY: FUNGUS DISEASES OF MEN AND OTHER MAMMALS. By Carroll William Dodge, Ph.D., Mycologist, Missouri Botanical Gardens; Professor, Henry Shaw School of Botany, Washington University, St. Louis. 900 pages, illustrated. Price, \$10.00. St. Louis: C. V. Mosby Co., 1935.

The title, "Medical Mycology," is apt to be misleading to physicians generally, for it is not a textbook of diseases whose origin is fungous infection, nor is there any but meagre clinical information. Rather it is a comprehensive botanical treatise covering all forms of fungi which have been known to attack man or other mammals, with the exception of Schizomycetes (bacteria), which group is well known to the medical profession. All known fungi of the classes Myxomycetes, Phycomycetes, Ascomycetes, Basidiomycetes and Fungi Imperfecti, which have been shown as pathogenic to mammals, are described as to their biological and physical reactions. In a word, here is a complete catalog of these fungi prefaced by a chapter on the biological and physical characteristics common to the whole family. In so far as is humanly possible, the huge bibliography has been made complete and accurate. The International Rules of Botanical Nomenclature (1930) are reproduced, and were followed by the author.

RECENT ADVANCES IN DERMATOLOGY. By W. Noel Goldsmith, M.A., M.D. (Camb.), M.R.C.P. (Lond.) Physician to St. John's Hospital for Diseases of the Skin; Assistant Physician to Skin Dept., University College Hospital; Physician for Diseases of the Skin to West End Hospital for Nervous diseases. With foreword by A. M. H. Gray, C.B.E., F.R.C.P. (Lond.), F.R.C.S. (Eng.). With 8 colored plates and 50 text figures, pages 520, price \$5.00. Philadelphia: P. Blakiston's Son & Co., Inc., 1012 Walnut Street, 1936.

In this book of over 500 pages the author has reviewed the advances that have been made in diseases of the skin during the past two decades. It therefore embodies the progress made in dermatology during the post-war period which has been productive also in advances in other departments of medicine and surgery. During the period of review embodied in this book, great developments have taken place in immunology, biochemistry and endocrinology which have affected also the field of dermatology. The subject is presented with due emphasis on the relation of researches in these and other departments. The work is in reality a monograph on diseases of the skin. It is a precise and scholarly presentation of the results of two decades of research.

MEDICAL PAPERS. Dedicated to Henry Asbury Christian, physician and teacher, from his present and past associates and House officers at the Peter Bent Brigham Hospital, Boston, Mass. In honor of his sixtieth Birthday, February 17, 1936. 1,000 pages. Baltimore: Waverly Press, Inc., 1936.

This volume contains contributions on almost every conceivable medical subject written by men who have served with Dr. Christian, both present and past. Among the papers is an introduction presenting a biographical sketch of Dr. Christian. The entire work it is understood is in honor of Dr. Christian's sixtieth birthday. Saith the preface: "To you, Henry Asbury Christian, we who have worked with you, present and dedicate this volume, as an appropriate token of our appreciation and esteem and in celebration of your sixtieth birthday. . . . You have been wise in many things, but especially so in surrounding yourself with men of ability. When, as must happen, at some future time, you are at last ready to sever your active interest in the institution, you will have provided men who can carry on successfully in the spirit of progress which you initiated." Notwithstanding this, the papers, as we have intimated, are almost infinite in variety; something for every taste.

The World Wise

"But, while what a professor speaketh
Not quickly to all people leaketh,
Dame Nature rules with mother's care,
That parting of the chain she spare,
And never the circle breaketh.
Meanwhile, until our lives are bound
By good philosophy, so sound,
Our plans she governs well enough
Forsooth, by hunger and by love."

—From Schiller, Translated by
Emil Amberg.

Good Treatment Anyway

A woman went to see a doctor. "Doctor," she exclaimed loudly, bouncing into the room, "I want you to say frankly what's wrong with me."

He surveyed her from head to foot.

"Madam," he said at length, "I've just three things to tell you. First, your weight wants reducing by nearly fifty pounds. Secondly, your beauty would be improved by freer use of soap and water. And thirdly, I'm an artist; the doctor is on the next floor."—*Montreal Star*.

THE MEDICAL EDUCATION OF JONES, BY SMITH*

W. S. THAYER, M.D.

"Fowler," said Jones, "never preached and rarely offered advice unasked. What we learned from him we learned from the example that he set. He taught us by his example the dignity of medicine as a profession. We are a self-conscious lot, we English-speaking people, and we, at least the better of us, despite the rude and vulgar bragging of our newspapers, are embarrassed by praise. We don't like to hear people in our presence speak in too fulsome a manner of the virtues of medicine as a profession and laud the doctor as a self-sacrificing saint. We know it isn't true. But nevertheless we who saw him realized the beauty and dignity of the art of medicine, and what it does for them who give themselves to it earnestly and with a whole heart. No man can lead the life of a serious practitioner and meet his fellows as does the doctor, without becoming a better man. Fowler's acts spoke to us far louder and clearer than words. Here are some of the things they said:

"Respect your profession and your colleagues. Hold your tongue!

"Do not allow yourself to laugh lightly and to jest on medical subjects in the presence of laymen. You would not speak thus of your mother. Hold your tongue!

"Do not allow yourself to enter into controversies on medical subjects with un-understanding people; it is useless and futile and will often deliver you and your cause into the hands of your opponents.

"Never speak ill of a colleague. If he seem to you to have done wrong, if you disapprove of his actions, show it by avoiding him if you will, but hold your tongue! Nine times out of ten you will find there are explanations for his action of which you know nothing. If you speak, you become his enemy. You can no more associate with him and remain an honest man. Is it worth while?

"Respect your colleague. Close your ears. Do not allow others to speak ill of your colleague in your presence. Generally they are mistaken. Remember that most doctors are honest men and decent fellows, even if you don't understand them. Hold your tongue!

"There is nothing that poisons the mind like the spoken and repeated word. The reiterated word, be it true or false, becomes ere long a conviction, alike to him who speaks it and to him who listens.

"Beware the power of the spoken and repeated word! The Christian Scientists know it. The German General Staff knew it; it was and is the whole story of their propaganda at home and abroad. An assertion, an accusation, a suspicion, repeated and reiterated, soon becomes a conviction. Hold your tongue!

"Idle gossip, careless criticism may injure your neighbor; it always poisons you.

"Be simple. Be yourself. Don't "pronounce." In the newspapers most doctors "pronounce," which means that too many of us come to deceive ourselves and believe in our own omniscience. Omniscience may not be a crime; it is a serious foible.

"Remember how little you know. Don't be afraid to say you don't know. Don't lay claim to superior knowledge.

"Don't judge your neighbor. Too often the ill you think of him is but the reflection of your own faults. "My son," says Marco to Guido, "each man sees in another individual that which he sees in him-

*From *Physician and Patient*, by L. Eugene Emerson, Harvard Univ. Press, Cambridge, 1929, pp. 95-99.

self; and each one comprehends that other individual in a different fashion, and precisely from the level of his own moral nature."

"Don't take yourself too seriously. Don't carry a chip on your shoulder. There is nothing so pathetic or so funny as a doctor with a chip on his shoulder. Too often it turns out to be a millstone. You are dealing with ill, difficult, often unreasonable people; but they are free agents. You have no divine right to prescribe to them a code of ethics. Their actions may disappoint you. They may pain you. Never let them offend you. A wise man has said, 'A cad is one who, when he is not giving offense, is taking it, and . . . a properly behaved person never feels insulted because he never need.' If you are capable of taking offense and feeling insulted at what your patients do, there is something the matter with you. You have lowered yourself to the level of your unreasonable patient. If a patient wants to leave you and go to your colleague, he has a perfect right to do so. Help him and encourage him to do it if need be. If he has lost faith in you or doesn't like you, you can't help him. You have no God-given proprietorship in your patients. They are their own masters. Send them on their way with your blessing; 'tis the surest way to get them back."

"Commune freely and frankly and openly with your colleagues. Mingle with them in societies. Seek their aid. Trust them in emergencies, and in the immense majority of instances they will merit your trust."

"Medicine is a jealous mistress. You can serve her only with your whole heart. Leave her if you will, but don't attempt to divide your allegiance with rivals, religion, art, politics, however alluring or worthy they may seem in themselves."

"The master word in medicine is work."

A. James DeNike, M.D., *Director*

DENIKE SANITARIUM

Established 1893

**Exclusively for the Treatment
of Acute and Chronic
Alcoholism**

*Complete information can be
secured by calling*

Cadillac 2670

or by writing to

**1571 E. JEFFERSON AVENUE
DETROIT, MICH.**

"These were some of the things that Fowler's example said to us. They are hard to live up to and they sound like preaching, but—if you had seen him!"

"Doctor," said one of the boys, "Have you read 'Arrowsmith'?"

"No," said Jones, "I have not, but I will."

He read it, and lay back in his chair and laughed. "By Jove," said he, "I might almost have written that myself twenty-seven years ago!"

Function of the Hospital

The *Westchester Medical Bulletin* quotes the following comment on corporate medicine from the book "*Economic Problems of Medicine*" by A. C. Christie, M.D. " * * * It should be understood clearly that the function of a hospital is to furnish hospitalization and certain facilities for the practice of medicine, the latter being wholly a function of physicians. When a hospital or a university receives money for the services of its hospital staff and assigns such money to its corporate income it has departed from its proper function and has entered the field of medical practice. This constitutes the corporate practice of medicine which is always unethical and in a number of jurisdictions has been held to be unlawful. * * *

"It is very important at the present time that the entire medical profession maintain a united front to resist encroachments upon the practice of medicine by many different types of organizations and institutions. Medical colleges, hospitals and the medical profession are allies in the battle against disease and they can maintain their alliance only if each adheres to its own special field and function."—*New York State Journal of Medicine*.

CLASSIFIED ADVERTISEMENTS

MORPHINE AND OTHER DRUG ADDICTIONS—Institutional care and treatment of selected patients who have responsibilities, wish to make good and learn how to keep well; methods easy, regular, humane. **Twenty-eight years' experience.** Dr. Weirick's Sanitarium, Elgin, Ill.

CHARTERS' MATERNITY HOSPITAL

A private hospital and home for young women desiring seclusion. Patients accepted any time during gestation. Physicians are requested to furnish a prenatal certificate. Rate reasonable. **FLUSHING MICHIGAN**

THE JOURNAL

OF THE

Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. 35

JUNE, 1936

No. 6

COMMON FUNGOUS DERMATOSES: THEIR DIAGNOSIS AND MANAGEMENT*

LESTER M. WIEDER, M.D.†
MILWAUKEE, WISCONSIN

So much material has appeared in the literature concerning the epidemiology and public health aspects of the fungous diseases of the skin during the past ten years that anything said here on this phase of the subject would be repetition. It should be borne in mind that the incidence of the disease continues to increase and that methods of diagnosis and treatment are still far from satisfactory, hence a clinical review of the subject is timely. The facts that the disease in its less obvious clinical forms continues to be misdiagnosed and therefore improperly treated, and that commercial agencies continue to besiege the layman with information upon the subject and offer him remedies accompanied by alluring claims, make it incumbent upon the physician to recognize and intelligently manage this group of diseases.

Skin diseases due to fungi comprise a large part of dermatologic practice and probably outnumber any other skin disease which the general practitioner encounters. In addition to the annoying and often disabling symptoms which they produce, they are acquiring a new economic importance in their relation to occupational skin disease. It is common experience among dermatologists to find that the presence of fungous infections on the feet often serve to render the skin of the hands more sensitive to chemical irritants, and that such individuals are poor risks in occupations with a high degree of cutaneous hazard. This is an im-

portant point to bear in mind for the physician making routine examination of new employees for such types of work in states with liberal compensation laws. In certain states the presence of this predisposing factor does not release the employer from financial liability for ensuing inflammatory disease in which irritant occupational contacts play a contributory part but which nevertheless do not noticeably affect the skin of the normal person.

Such occupational conditions, developing upon the hands in patients with active ringworm of the feet, are often difficult to differentiate, especially from the eczematoid form of the dermatophytid. These are lesions produced upon the hands or other parts due to absorption of toxic products from the active focus, usually found upon the feet. The controversy arising from this situation may lead to expensive litigation for the employer and usually requires expert opinion to decide. As one state after another broadens its compensation laws in accordance with the present liberal social

*Read before the Seventieth Annual Meeting of the Michigan State Medical Society, Sault Ste. Marie, Sept. 26, 1935.

†Dr. Wieder graduated from the University of Michigan Medical School in 1922. His practice is limited to dermatology and syphilology. He has been on the faculties of University of Wisconsin and Marquette Medical Schools. He is a member of the Chicago Dermatological Society and of the American Dermatological Association.

trend to include all forms of sickness related to occupation, as well as injuries, this close relationship of fungous disease and occupational disease of the skin will be of paramount importance to the industrial physician.

Attempts at detailed consideration of classification of the pathogenic fungi have no place in a purely clinical paper. This is a problem for the mycologist and is apt to confuse rather than clarify the understanding of this group of diseases by the average clinician. However, it is important to know that various fungi, monilia, yeasts and cryptococci may produce clinically similar eruptions. It is necessary to examine scrapings microscopically and to make cultures to identify the genus of the organism, while fermentation and agglutination tests are required for their final classification, but this is of purely academic interest. The practical aspects of laboratory study of these diseases as they interest the practitioner will be considered later.

Clinical Forms

It should be emphasized that the common forms of ringworm with only an occasional exception occur primarily upon the feet, hands, groins, and axillæ. Although the common forms may appear upon any part of the body, lesions of true ringworm elsewhere than in the areas mentioned are apt to be of the annular or *tinea circinata* type and are usually due to accidentally acquired infections from the lower animals. This group will be discussed in more detail later. For practical clinical purposes the common form may be divided into the acute and chronic forms.

The acute form is almost invariably vesicular in type and usually begins upon the feet, involving the flexures of the toes and their webs, and often the soles, especially adjacent to the toes and at the instep. The vesicular stage is often preceded by scaling, fissuring, and maceration of the webs of the toes, especially of the third and fourth webs. If only the dorsal or lateral aspects of the feet and not the toes are involved by vesiculation, contact dermatitis such as may be produced by shoe-dyes, poison ivy, and the like, should be suspected. It is relatively uncommon to find the vesicular form of the disease primary other than on the feet and

the diagnosis in such cases should be confirmed by microscopic examination if possible before antiparasitic drugs that may be irritating to a contact dermatitis are employed, even after the vesiculation has subsided. The vesicle of fungous dermatitis may be either single or in groups, may vary in size from a pin-head to a large bleb but usually has less associated inflammatory reaction and edema than is the case with blistered eruptions due to chemical contacts, which are also apt to be linear and angular in outline. In ringworm the individual vesicle is also usually more deeply seated with a thick roof, giving a tapioca-pearl appearance. Symptoms may be absent and it is common to find such lesions of which the patient is entirely unaware present upon the feet, whereas in contact dermatitis itching, smarting, and burning are apt to call the patient's attention to the eruption.

As stated, such vesicular forms are by far most common upon the feet, though when similar lesions first appear upon the hands the patient's attention is often first directed to the fact that he has a skin disease. At this point two important clinical facts should be recalled. The first is a lesson that every dermatologist soon learns, that is, in every case in which a patient seeks consultation because of an eruption of the hands in which the diagnosis is not at once apparent, insist upon examination of the feet. Such insistence will often be met by the protest that the feet do not trouble the patient, but in many such instances an asymptomatic though active, even vesicular, fungous dermatitis found upon the feet will account for the presence of the hand condition and also account for the failure of previous therapy directed only to the hands.

The second point, hardly less important as regards therapy, lies in recognition of the fact that the hand lesions, while they are a direct result of the foot infection, are not necessarily due to actual invasion of the skin of the hands by the ringworm fungus. More often such lesions of the hands are an allergic manifestation resulting from absorption of fungous elements and their toxins from the focus on the feet, and are referred to as phytids. This fact is important from the standpoint of therapy, as in such cases measures suitable for treatment of the active infection on the feet

may be chemically irritating to the skin of the hands. While microscopic examination of vesicles from the feet in such cases may show the fungi in large numbers, similar specimens from identical appearing lesions of the hands will either be completely negative or show only a few degenerating organisms here and there. Such attenuated forms are thought to be carried to the hands by way of the blood stream and that their presence in the circulation produces an allergic state. In such cases the intracutaneous injection of trichophytin, the analogue in fungous diseases of tuberculin in tuberculosis, will usually produce a marked local and sometimes a focal and systemic reaction, taken to indicate the existence of an allergic reaction to the toxins contained in or elaborated by the fungus. In passing, it may be said that the value of trichophytin in therapy is doubtful and in diagnosis its use is limited and often difficult to interpret.

The chronic form of ringworm infection is usually eczematous in type, showing varying degrees of inflammation and scaling, sometimes with scattered marginal vesicles or pustules, and occasionally is hyperkeratotic and fissured. These forms are more prevalent than the acute form but likewise are apt to be primary on the feet and also may give rise to distant allergic manifestations or phytids, the original focus being overlooked by the patient. They are apt to occur in patches on the toes and soles, and may produce erythematous-squamous, sometimes exudative involvement of the genito-crural folds and axillæ. On the hands they may produce patches like those on the feet but are often more inflammatory in character, with sodden, denuded surfaces, marginal vesiculation, and inflammatory edematous bases. As the lesion regresses, central healing may occur, producing the annular lesion which in the lay mind accounts for the ancient misnomer, "ringworm."

As an aid in clinical diagnosis, it should be stated here that true ringworm appears very infrequently upon the face in spite of the frequency with which this diagnosis is made. This error is due to the confusion of impetigo, which so commonly attacks the face, with the relatively uncommon annular forms of ringworm lesions contracted from the lower animals, and which usually involve the trunk and upper extremities.

Their differentiation is important because their treatment differs radically.

Common ringworm eruptions of the groins and axillæ as well as of the scrotum, perineum, intergluteal cleft, umbilicus, and folds of the breasts, are usually made up of diffuse erythematous, scaling patches. They sometimes show fine vesiculation at their margins, and especially when produced by monilial organisms, the surfaces may be denuded, glistening and moist. This form is especially prone to occur in the obese patient, and when widely distributed should arouse suspicion of disturbances of sugar metabolism in the subject. It is now recognized that many of the cases formerly regarded as intertrigenous eczemas of metabolic origin due to irritating secretions are actually cutaneous moniliasis.

No epidermal structure is exempt from attack by fungi, even involvement of the nail plate, or onychomycosis, being extremely common, and every case of chronic paronychia should be investigated for monilia and cryptococci. Even the hair shaft may be attacked as is commonly the case in some of the forms of ringworm of the hairy areas contracted from the lower animals; the mucous membranes of the mouth and of the female genitalia are occasionally involved, especially by the monilial group.

Differential diagnosis presents few difficulties in cases involving only the feet. The vesicular forms of the disease in this region usually need be differentiated only from contact dermatitis, which is uncommon on the feet except upon the dorsal and upper lateral aspects, areas infrequently affected by fungi. Vesicular and bullous lesions of toxic or medicamentous origin may also involve the feet but usually involve other regions to an extent making differentiation easy. Also, except in the most acute stages, the vesicles at some stage of their evolution will show fungi on microscopic examination, though the diagnosis should never be ruled out because of inability to demonstrate them. Cases presenting lesions of the hands only, or with foot lesions so insignificant as to suggest no etiologic connection, may be difficult to differentiate from contact dermatitis. A history of exposure to potential chemical irritants, itching and burning preceding appearance of the lesions, closely studded superficial, thin-

walled vesicles on an erythematous base often in linear or angular patches, all should be taken as characteristics of contact dermatitis. As opposed to this picture, patches which are round, oval, or irregularly shaped but without angular outline, showing only moderate inflammatory reaction and with deeply seated thick-walled vesicles often containing a thick, glairy serum, and with little discomfort except occasional attacks of itching, usually characterize true ringworm of the hands. These lesions often tend to form vaguely annular patches but do not invariably do so by any means. On the other hand erythema multiforme, drug eruptions, lichen planus, and other eruptions may produce ring-shaped lesions of the hands as well as of other regions.

The eczematoid type of ringworm may resemble eczemas of other causes, both internal and external. In the former, careful history of association of the onset of the attacks with the taking of certain foods or drugs, gastro-intestinal disorders and the like may give a clue as to etiology, and the presence of lesions elsewhere may aid in differentiating from ringworm. In those cases due to external causes, detailed consideration of occupational contacts, in the office and professional worker as well as in the factory worker or housewife, may indicate the etiology. Details of the method of using the hands in factory operations should be obtained, as repeated contact of the skin with an object to which the patient is only moderately sensitive may produce a patchy eruption baffling in its similarity to ringworm. It must also be borne in mind that such an individual may at the same time have active dermatophytosis of the feet unrelated to the hand condition. Such cases are difficult to evaluate as to exact etiology, especially from the standpoint of liability, and often even more difficult to treat. The use of the patch test, made with all the materials with which the patient comes into contact at his work, may be of much value in such cases.

One must also remember that cases originating as true fungous infection may become secondarily eczematized through the effects of external irritants, usually occupational but often therapeutic in nature, finally presenting themselves as cases of eczematoid dermatitis of indeterminate type. In

the less inflammatory cases of this type, provided sources of external irritation can be excluded, cautious antiparasitic treatment may be of value in establishing a diagnosis.

The dry, patchy, infiltrated and squamous forms involving the palms and soles may be simulated by psoriasis or syphilis in either the secondary or tertiary stages. The presence of more typical lesions elsewhere in the case of either condition, the history, and serologic investigation in syphilis should be of help in this situation.

Pustular forms of ringworm of the palms and soles usually appear in those cases in which a vesicular reaction of unusual intensity has taken place, or as a result of secondary pyogenic infection. In the latter type lymphangitis and lymphadenitis are common complications. Where repeated crop-like groups of scattered small pustules with associated inflammatory reaction but relatively little discomfort appear upon the palms and soles, usually symmetrically, cutaneous embolic coccigenic lesions due to the liberation into the blood stream of bacteria from an internal focus of active infection is a possibility. Likewise, vesico-pustular forms of dermatophytosis may be so closely simulated by eczematoid infections of bacterial origin that only microscopic study can differentiate them.

Tinea circinata or *trichophytosis corporis* is far less common than the forms of ringworm just described. It is usually acquired from household pets, especially the cat. The strikingly annular lesions, which usually appear over the trunk and upper extremities, suggest the diagnosis, and it is this form of ringworm that is often confused with impetigo. The lesion of impetigo has a clear or yellowish crusted center with a peripheral superficial bleb, the top of which is readily peeled off, while the lesion of *tinea circinata* shows central inflammation and scaling with peripheral minute vesicles or pustules which are often follicular in localization.

This form of the disease may have to be differentiated from seborrheic dermatitis and pityriasis rosea. The yellow-red tint of the seborrheic lesion, its presence in the scalp, post-auricular regions and other areas in which ringworm is not commonly found, and the absence of vesicles and pustules

serve to identify it. The very superficial character, pinkish-red color, and oval form of the lesion of pityriasis rosea in greater numbers, with its long axis characteristically parallel to the lines of cleavage of the skin, are quite typical as a rule.

Tinea barbæ is usually found in farmers, herdsmen, tannery or packing-house workers handling raw hides and as such is a compensable disease. It often begins on the cheek, neck, or forearm but may involve any hairy area. The lesions are primarily follicular and the organism can be easily found on hair shafts plucked from the active areas. Hypertrophic granulomatous masses, with deeply placed foci of suppuration, called *kerion celsi*, may develop. This condition often produces fever and malaise, and may be accompanied by the production of phytids, localized to the hands or more widespread.

Tinea capitis is uncommon in this country except in clinics in cities having a large foreign and poverty-stricken population, or in institutions, where it is usually left in the hands of the dermatologist. It is rarely a problem in private practice. *Tinea versicolor* is far more common and is easily recognized by its fawn-colored patches showing branny desquamation, often apparent only after rubbing the lesion. In this country *tinea favosa* or *favus* is so rare as to be worthy only of mention in a practical discussion.

Clinical knowledge of the monilial and yeast infections has been rather meager until the past few years. It is now known that they may produce diverse clinical pictures, such as erosive dermatitis of the digital webs, intertrigenous eczemas, both dry and moist, of all flexural areas, onychomycosis and paronychia, pruritus ani and vulvæ, lesions of the face, neck, and trunk resembling seborrheic dermatitis, stomatitis and glossitis. They may also produce monilids, analogous to the phytids. Differential diagnosis of this group, because of the extreme variation of their clinical forms, must rest upon identification of the organism in the scraping or culture. Any of the types of lesions mentioned which have no assignable cause should be examined for these organisms. They are prone to be very resistant to therapy.

Laboratory Methods

In general, the methods of laboratory study are similar for all forms of the disease. While it is often superfluous to examine the tissues microscopically to establish a diagnosis, nevertheless anyone routinely handling this group of diseases should be experienced and competent in performing the necessary examination when needed in the atypical or disputed case. Failure to find the organism does not negate the diagnosis and on the other hand it is necessary to recognize and disregard saprophytic fungi growing on the tissues but not in them.

For examination or culture, abundant material should be collected, preferably taking roofs of vesicles or scales from active marginal areas. In hairy regions extracted hairs should also be examined. For direct examination some of the material should be placed on a slide with 10 to 30 per cent potassium hydroxide solution, gently warmed, and pressed out flat. Keratotic material and nail structures may require twelve to twenty-four hours soaking in alkali. The mycelia are easily recognized when present and their appearance can be more easily recognized after one view of a positive preparation or even from a good text-book illustration than from any amount of description. The monilia and yeasts are not so easily identified and one should not consider the findings positive in the case of the yeasts unless budding forms can be found. Repeated examinations from different portions of the eruption and at different times may be necessary before organisms can be found, and sometimes even in definite cases both microscopic and cultural examination may be persistently negative.

The culture should be made only upon Sabouraud's media, as the fungi do not grow in typical form nor as well on ordinary media. Material for culture should not be taken from recently medicated areas. If the material is dried for several days or is soaked in 70 per cent alcohol for twenty to thirty minutes and dried before culturing, contaminating growths may be reduced.

In general, the pathogens can be distinguished from the saprophytes by their whiteness or faint tinting compared with the deep greens, browns, and blacks of the latter. They are also apt to be slightly

downy, sometimes with convoluted and radially fluted surfaces, whereas the saprophytes usually show a fuzzy, aerial type of uniform growth. The saprophytes usually cover the entire slant within a few days, while the pathogen reaches a colony the size of a small coin only after eight to ten days. The monilias may grow more rapidly but in the common forms produce a smooth, glistening colony resembling a drop of very soft Camembert cheese. The differentiation of the various species further is of academic interest, although differentiation between the monilia and fungi is of some practical importance as the prognosis for duration and even for curability in the monilial types is often very uncertain and treatment may vary accordingly.

While the laboratory procedures are rarely employed by the general practitioner he should be encouraged to employ them; the technic, once performed, is simple and requires only a few minutes. Successful search for the causative organism adds to the interest of the case and repeated examination may furnish a good index of the antiparasitic value of the medicament chosen.

Therapeutics

Commercial propaganda has created much popular interest in the treatment of the ringworm infections, and one rarely sees a patient presenting a frank form of the disease who has not attempted self-medication with a proprietary, often with distressing results. These preparations may prove very irritating, often adding a dermatitis venenata to the troubles of the already distressed patient, and in many instances lower the resistance of the skin of the host to the invading organism. It must be apparent at the start that no panaceas can exist for the treatment of a disease due to a highly resistant organism with great power of adaptation and occurring in sites and in degrees of inflammation which greatly modify the response and even the tolerance of the skin to chemically active medicaments.

With this in mind, therapeutic agents should be chosen which, while exerting a reasonable degree of inhibitory effect upon the organism, will not irritate the skin of the host. Failure to recognize this rule accounts for the ill-results seen in many cases.

In the vesicular forms the use of ointments is generally unsatisfactory; the potassium permanganate solution soak is very useful in this stage. Combined with repeated applications of an evaporating and astringent lotion such as weak aluminum or lead subacetate solution it usually produces rapid drying of the vesicles. Sparse vesicular lesions may be incised and 2 to 5 per cent silver nitrate or half strength tincture of iodine may be applied to their bases.

When the vesicles have dried, lotions may be discontinued but through its inhibitory effect on secretions the continued use of the permanganate may render the skin a less favorable growth medium for the organism. Ointments may now be used, but the formula should be varied to meet the needs of the individual case. The available drugs are legion and many of them are effective, but in general the best results will be obtained with varied formulas based upon an intimate knowledge of the properties of a few effective drugs gained through careful observation.

The type of ointment originated by Whitfield continues to be of great value when intelligently used, and its value may be increased by fortifying it with additional drugs; to begin with, a weak mixture containing two to 3 per cent of salicylic and 4 to 6 per cent of benzoic acid may be used, increasing the active ingredients if there is no irritation from the weaker mixture. To save the patient expense, it is practical to prescribe a preparation of maximum strength with instructions to the patient to dilute the mixture with vaseline at first, reducing the dilution as the lesions respond and the skin shows no evidence of irritation. If the condition remains resistant the proportions of salicylic and benzoic acids may be increased to 5 to 6 per cent and 10 to 12 per cent and higher for occasional cases. The addition of precipitated or colloidal sulphur to the ointment may be of benefit. Chemotherapeutic studies have favored use of the essential oils and thymol, but these must be used with caution as they may cause irritation. In the test tube boric acid has rather high fungistatic power, and boric acid solution soaks may often be substituted for permanganate solution with benefit, and the change is usually welcomed by the patient.

In the less acutely inflammatory eczematoid forms crude coal tar paste is sometimes extremely useful. In the writer's experience the tar distillates and so-called "white tars" do not yield comparable results. During the past several years a number of organic mercurial salts have been highly endorsed for the treatment of fungous diseases. While their addition to the armamentarium occasionally furnishes an alternative drug in a resistant case, in general their effects are disappointing and they offer little or no advantage over older methods. Nowhere are the shortcomings of chemotherapeutic experiment more apparent than in the field of fungous diseases. Drugs destroying pathogenic fungi in the test tube in dilutions of 1:30,000 or higher may fail to cure ringworm even after a period of months when used daily in concentration of 1:100.

Consideration must also be given to the geography of the condition in the selection of topical applications. For example, an ointment of the Whitfield type suitable for use on the feet may produce violent dermatitis in the groin or axilla. In these areas a very mild ointment of salicylic acid, sulphur, and tar may be well tolerated and very effective.

Of the physical therapeutic measures, ultra-violet irradiation properly administered may be of value, especially in tinea circinata and tinea versicolor. X-rays have a limited use in certain chronic infiltrated and dully inflammatory cases but it must be emphasized that the x-ray has no fungicidal effect, and is probably useful in promoting

absorption of the infiltrate and inhibiting hyperhidrosis. It should also be emphatically stated that ringworm is a chronic and recurrent disease and that prolonged and injudicious use of the x-ray is apt to lead ultimately to permanent damage to the tissues, such as atrophy, telangiectasia, keratoses, and ulceration. X-rays are especially useful in the treatment of kerion celsi and are often used for temporary epilation in tinea capitis.

Even after the ringworm infection has been eradicated so far as visible pathology is concerned, care must be taken to prevent reactivation or reinfection. Infected material worn during the active phase of the disease such as shoes, slippers, gloves and the like may be disinfected with a formaldehyde candle, which may also be used for rugs. The frequent use of a 10 to 15 per cent sodium thiosulphate or 0.2 to 0.5 per cent sodium hypochlorite solution footbath may also be used as a prophylactic in home or institution. Often a weekly or bi-weekly application of a Whitfield type of ointment for a period preceding the onset of warm weather is an effective means of preventing what otherwise would be an annual recurrent attack such as many people experience each summer. Only the more widespread use of prophylactic methods and the careful consideration of each case by the physician will ultimately yield control of this increasingly common and troublesome disease.

208 E. Wisconsin Ave.

Volkman's Ischemic Contracture: Associated With Supracondylar Fracture of Humerus

Henry W. Meyerding, Rochester, Minn. (*Journal A. M. A.*, April 4, 1936), points out that Volkman's ischemic contracture is most frequently associated with supracondylar fractures treated by acute flexion. In the presence of swelling and hemorrhage, acute flexion tends to impair circulation by increasing pressure in the antecubital space, even though the fracture is reduced. Reduction of the fracture may be deferred several days, the treatment being directed to the care of the soft parts in order to preserve function. Elevation of the arm hastens the relief of swelling in recumbent treatment, abduction on an airplane type of splint in the ambulatory treatment. Drainage of large hematomas may be indicated. Reduction and internal fixation of the fracture following removal of blood clots is feasible and is a useful aid in preventing impaired circulation. Prevention is possible in many instances, provided the patient is seen in time and the utmost care is used to combat circulatory damage. Hemophilia also may

cause Volkman's ischemic contracture. Conservative methods of treatment, such as the stretching method as advised by Sir Robert Jones, constant stretching with the banjo splint, and physical therapy give the best results. Severe deformities of long standing require in addition surgical intervention. Intrinsic or extrinsic pressure from various causes cuts off the venous flow while permitting some arterial flow; hemorrhage, with the formation of blood clots, infiltration, edema, acute flexion, malposition of fragments, and pressure of bandages, splints and casts are some further factors concerned in impairing circulation. In obtaining the history special attention should be paid to the type of injury, the length of time before treatment, and evidence of injury to blood vessels or nerves. A record of the previous treatment, together with roentgenograms taken before and after reduction, should be available before the consultant assumes responsibility. Volkman's ischemic contracture may result from injury or hemophilia even when treatment has not been given.

FRACTURES OF THE SPINE

A. D. LA FERTÉ, M.D.†
DETROIT, MICHIGAN

Owing to the increase in the number of fractures of the spine in recent years, and the new methods of treatment which have been developed, it has seemed worthwhile to review briefly the subject of the care of these cases. Fractures of the laminæ, spines and transverse processes of the vertebræ will not be considered in this paper.

A fracture may occur in any portion of a vertebra, but is most common in the body, and since the spinal column encloses the spinal cord, injury to the latter by contusion, hemorrhage, or severance is not uncommon and may be present and not noticed unless paralysis be apparent.

The symptoms of fracture of the spine are generally pain and stiffness of the neck or back in a patient giving a history of having had a forced hyperflexion of the spine. Examination may reveal a kyphos at the site of injury.

In patients giving the above classical history and symptoms the diagnosis may be easily made, but not all cases have such a simple outline, and it is in the latter group that a fractured vertebra is not found, and consequently does not receive the proper treatment.

Recently I have seen two cases, neither of which gave the usual history of a forced flexion and in neither did the patient complain of pain or stiffness in the back. One patient gave a history of being in an automobile which stopped suddenly, throwing her sidewise against the back of the front seat. Her only complaint was pain in the anterior chest region. Examination revealed tenderness on pressure over the spinous process of the eighth dorsal vertebra and an x-ray revealed a compression fracture at this point. The other patient gave a history of having slipped on the ice and of sitting down, not violently, but rather hard. His complaint was pain in the chest on deep inspiration, and coughing. Examination revealed tenderness on pressure over the spinous process of the sixth dorsal vertebra and x-ray revealed a compression fracture at this point. These two cases, I believe, if not properly treated would become, in later years, typical examples of the very disabling Kummell's disease.

In view of the history of the above cases,

it would seem wise to examine the spine in all accident cases complaining of pain in the chest, in which the trauma suffered might not account for direct injury to the chest wall.

Treatment

The treatment of a fractured vertebra begins at the point where injury is sustained. That is, if a fractured vertebra is diagnosed or suspected, the patient should be immediately placed face downward. Such a procedure will prevent further impaction of the fracture and may even tend to secure a disimpaction or reduction.

The next step is to secure an anteroposterior and a lateral x-ray of the involved area, as a positive diagnosis of fracture of the spine can seldom be made without proper films.

Cervical Vertebræ

In cases without cord injury, the patient may be placed on a Bradford frame or in a bed with a hard mattress, and head traction applied over a pulley. Traction should be continued until all spasm is relieved and the greatest possible reduction secured. Some forms of fixation apparatus may then be applied and kept in position until such time as consolidation of the vertebra has taken place. During the time the patient is in traction, it is well to place blocks under the head of the bed to prevent the patient's moving upward and possibly releasing the traction (Figs. 1, 2 and 3, Case 1).

Thoracic and Lumbar Vertebræ

It has been my experience that one of the most distressing symptoms of fracture of a thoracic vertebra is the abdominal distention caused by ileus and that when a gradual reduction by the use of one of the va-

†Dr. A. D. La Ferté graduated at Jefferson Medical College, 1910. His specialty is orthopedic surgery. He is Attending Orthopedic Surgeon at Receiving Hospital, Detroit, Michigan, and Professor of Orthopedic Surgery, Wayne University College of Medicine.



Fig. 1. Case 1. Anterior dislocation of first cervical vertebra.

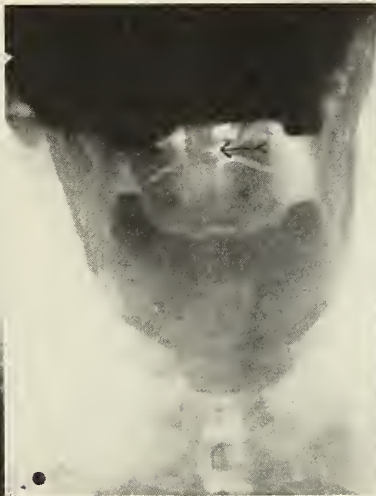


Fig. 2. Case 1. Fracture of the odontoid process of the second cervical vertebra.

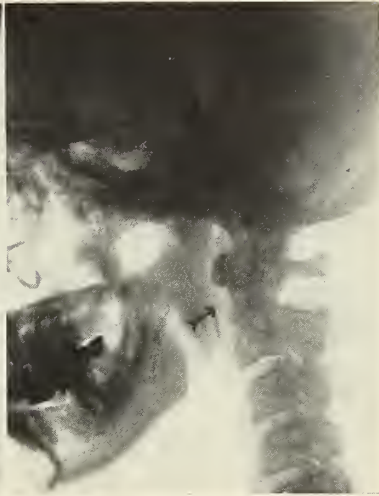


Fig. 3. Case 1. Anterior dislocation of first cervical vertebra and fracture of the odontoid process of the second cervical vertebra twenty-six days after the application of head traction with the patient on a Bradford frame.

rious frames or beds is attempted, this distention not only increases but is accompanied by extreme nausea and vomiting. This latter has been one of the important factors in influencing us to discontinue the methods of gradual reduction and proceed to the immediate reduction of the fracture.

It is also worthy of note that it is difficult to keep patients quiet and in the proper position on a frame or other form of hyper-extension apparatus, also that a long hospitalization with maximum nursing care is demanded.

One of the first to proceed with the immediate reduction of compression fractures was Davis. His method consisted in anesthetizing the patient and partially suspending him by the feet to secure hyperextension of the spine and to apply pressure over the spinous processes in the fracture area to secure dis-impaction. This procedure was followed by the application of plaster shells, and finally by a back brace. Early return to active work was encouraged.

Other methods of securing immediate reduction have been devised which necessitate the use of an anesthetic which, in my opinion, is conducive to greater distention and vomiting. There is also the disadvantage that special apparatus is needed, which is not available in all communities.

In 1900 R. Watson Jones, of Liverpool,

England, reported a method which, in our hands, has given eminent satisfaction, and, for the benefit of those unacquainted with its use, a description follows.

To secure hyperextension of the spine, the patient is placed face downward, his lower limbs, as high as the groin, being supported on a table, while the movable end of an operating table is elevated about twelve to eighteen inches higher than the former table and the patient's arms and head are supported on this. No anesthetic is used. The patient is given morphine before being placed on the table. The sagging produced by the position of the table hyperextends the spine and the cancellous bone of the vertebra opens up and the fracture becomes reduced. A piece of one-half inch felt, six by four inches, is centered over the spinous process of the fractured vertebra and, without any pause, a plaster jacket is applied. When the plaster is dry, an opening four by two inches is cut from over the felt pad in order that no direct pressure be applied to the spinous process of the affected vertebra. In order to secure greater hyperextension in the high dorsal fractures, it may be advisable to immobilize the lumbar spine by using a bandage just below the fracture and bringing it down to the foot of the table in front of the patient. Hyperextension in the upper dorsal region may also be augmented

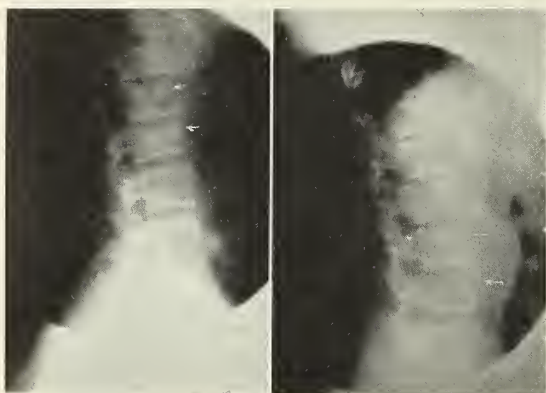


Fig. 4. Case 2 (left). Compression fractures of the second and third lumbar vertebrae.

Fig. 5. Case 2 (right). Compression fractures of the second and third lumbar vertebrae two days after reduction.

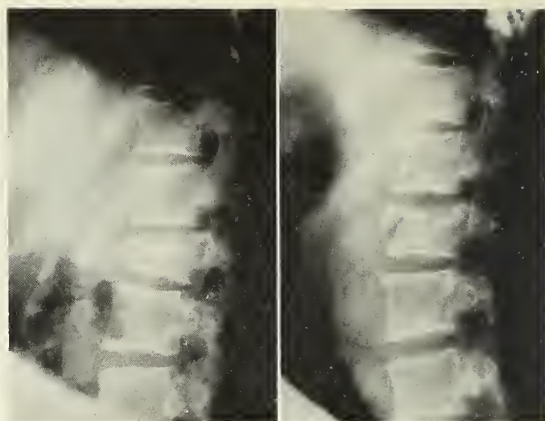


Fig. 6. Case 3 (left). Compression fracture of first lumbar vertebra. Note absence of normal lumbar curve.

Fig. 7. Case 3 (right). Compression fracture of first lumbar vertebra two days after reduction. Note restoration of normal lumbar curve.

by using a sling under the arms, extending upward and backward from the prone patient (Figs. 4 and 5, Case 2).

After-treatment

The patient is placed in bed and allowed to turn from side to side and back to front as soon as the plaster dries. Within a few days the patient is allowed to walk. At the end of a week, spinal exercises are given, which the patient must practice three times each day. To take these exercises, the patient lies face downward with the arms by the side and intermittently raises the head and shoulders from the bed. He then grasps the frame at the head of the bed, upon which the mattress rests, and, keeping the knees extended, raises both legs from the bed. The object of the exercise is to encourage the normal use of the muscles and thus promote circulation in the damaged area and to supply the proper muscular support for the patient upon removal of the cast. If the patient has not exercised sufficiently to develop the muscles to the extent that they will hold the spine erect, or if the patient be of the stoop shoulder type, it would be well to have him wear a light spinal brace until such time as the x-ray demonstrates a complete consolidation of the fractured vertebra.

In the immediate after-care, morphine has not been indicated and should not be used because of the danger of ileus. If distention takes place a window may be cut from the front of the cast. While, upon

the completion of each cast, we have outlined an area for the establishment of a window, we have not yet been called upon to carry out such a procedure.

Injury to the Spinal Cord

In fractures of the cervical spine with cord injury, a very serious condition is presented, the mortality rate being from 80 to 90 per cent, and it is my feeling that laminectomy must be considered, though it does not offer great hope of success.

As a general rule, in fractures of any part of the spine, when the weakness or paralysis is complete and seen within 24 hours, laminectomy should be done. If the paralysis is slight, conservative measures are followed. If the paralysis increases, it is probably due to a hemorrhage, and laminectomy should be performed. In cases showing a partial paralysis, but with the x-ray demonstration of a bone fragment in the spinal canal, a laminectomy should be done even though the patient is not seen immediately following injury.

The earlier a laminectomy is done, the greater is the chance for the return of function. Laminectomy three days after injury would probably give no beneficial result. If at any time the Queckenstedt test indicates an obstruction in the spinal canal, a laminectomy should be done.

It must be emphasized that, in cases suffering from a retention of urine, no catheterization should be done. Hot applications

may be used over the bladder area and an automatic bladder will be established.

Summary

1. All patients with back injuries should be kept in a prone position until treatment is established.
2. An early x-ray examination should be made in all cases of injury to the spine.
3. Symptoms typical of vertebral fracture are not present in all cases.
4. Laminectomy is indicated in cases

with complete paralysis if seen within twelve hours.

5. Catheterization of the bladder is seldom indicated.

6. Ileus is a distressing symptom and is less likely to take place or to persist when immediate reduction is performed.

7. Immediate reduction of fractures of the spine makes the patient more comfortable, enables him to get about within a few days and hastens his return to active duty.

THE RESULTS OF TONSILLECTOMY IN ALLERGIC PATIENTS

A Follow-up Study of 433 Cases

G. L. WALDBOTT, M.D., M. S. ASCHER, M.D., and F. W. GIESE, M.D.
DETROIT, MICHIGAN

The question whether or not tonsillectomy will improve the allergic state is of great practical importance. Our interest in this subject has been particularly aroused by recent studies concerning the rôle of lymphoid tissue, especially of the thymus gland in the allergic state (Waldbott^{11,12}). It has been stated (Strobl and Wasitzky¹⁰) that the lymphoid tissue is largely concerned with the storage, and possibly with the production, of antibodies. Considering the function of other lymph glands, it appears likely that the tonsils and adenoids, due to their anatomical position, may be involved in absorption of antigenic material, particularly of the commonly inhaled antigens and bacteria.

Most earlier writers (Scheppege⁷) were inclined to recommend the routine removal of tonsils and adenoids in allergic individuals. More recently Peshkin⁶ and others, interested in pediatric allergy, believe that tonsillectomy may have an injurious effect upon the allergic state. Bullen² presented statistical data comparing the therapeutic results in three hundred tonsillectomized allergic patients with a similar number whose tonsils had not been removed. His data showed that tonsillectomy is of little, if any, value in the treatment of allergy. He did not, however, commit himself as to the possible injurious effects that may follow the operation. Stout's⁹ results on tonsillectomy in allergic patients were inconclusive. Hutchison³ observed that asthma and hayfever began soon after tonsillectomy in a number of cases, a fact which he believed occurred too frequently to be a mere coincidence.

In this investigation, we attempted to answer the following questions: First, what

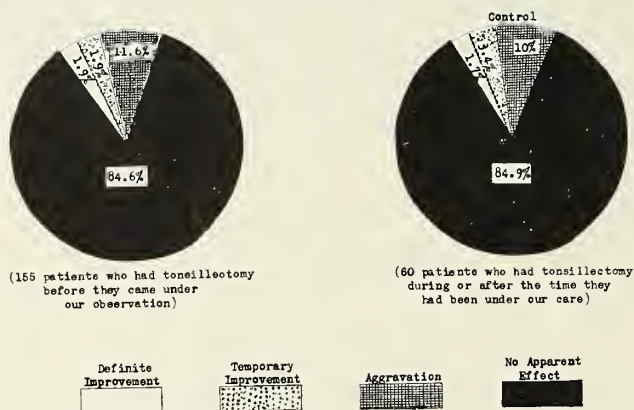
benefit or ill effect results from tonsillectomy in allergic individuals, i.e., what are the indications and contra-indications for the operation? Second, at what age and season of the year might one expect the best results? Third, how does the effect of tonsillectomy, if performed for conditions other than allergy, such as tonsillitis, upper respiratory infections, arthritis, etc., compare in allergic individuals with a control group of non-allergic cases? Fourth, does a skillfully performed tonsillectomy as it is performed by a laryngologist produce better results in allergic patients than if it is done by a general practitioner?

Out of a total of 1,112 patients with asthma and hayfever, 433 had had their tonsils removed. Three hundred seventy-three of these were personally interviewed regarding the effect of the operation. Of the 433 patients sixty had undergone the operation after they had been under our care; they answered the respective queries through a questionnaire. The questions included the reason for the operation, its time relation-

ship to the onset of the allergic state, its effect upon allergic manifestations, and its effect on existing pathology other than allergy. The latter group thus served as a

Loss of blood, the administration of drugs, the anesthetic, trauma and subsequent infection of the tonsillar fossæ could be considered. Inasmuch as the untoward effects

CHART I. EFFECT OF TONSILLECTOMY AND ADENOID-ECTOMY ON THE ALLERGIC CONDITION IN 205 PATIENTS WITH ASTHMA AND HAY FEVER.



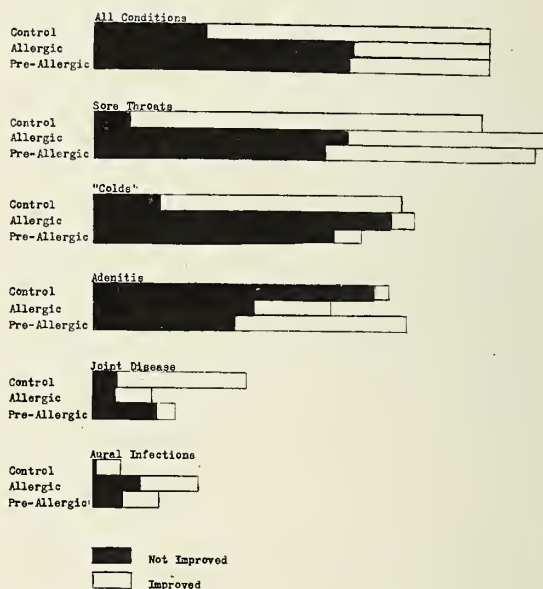
control, inasmuch as it could otherwise be argued that only such cases in which the operation had failed had been under our care, and were the source of this study.

I. Effect on the Allergic Condition

Out of the 433 cases, 205 patients had allergic manifestations preceding the operation. In ninety-eight cases the operation was performed solely for the relief of asthma and hay-fever. Only four of the 205 patients (Chart I), or 1.9 per cent, showed definite improvement of the allergic symptoms; a similar number, 1.9 per cent, obtained temporary relief. On the other hand, in twenty-four cases, or 11.6 per cent, there was a decided aggravation of allergic symptoms. In four patients the aggravation ensued immediately after the operation and persisted for several months. In the control group of sixty cases, fifty-one reported no apparent change in the allergic state, one was definitely and two temporarily improved; in six an aggravation of allergic symptoms was reported. Thus the results of tonsillectomy on the allergic state in the control group corresponded well with the entire group of 205 cases.

It is, of course, impossible to state which of the many causes, coincident with the operation, might be responsible for the aggravation which ensued following the operation:

CHART II. COMPARISON OF EFFECT OF TONSILLECTOMY UPON NON-ALLERGIC CONDITIONS FOR WHICH THE OPERATION WAS PERFORMED.

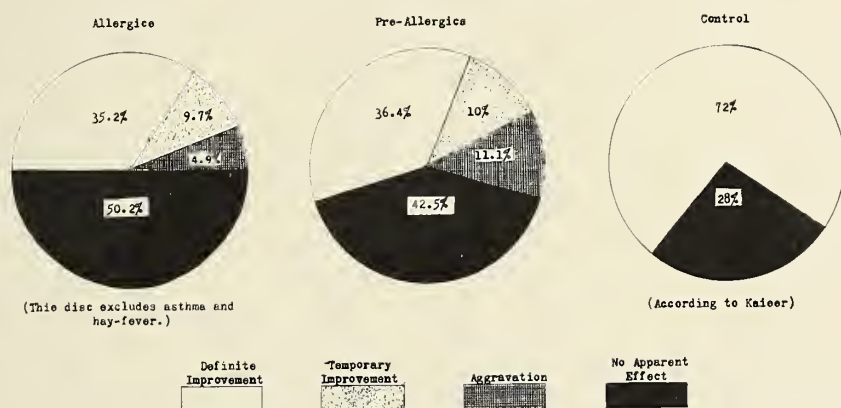


usually persisted for several months, it is probable that there was a loss of protective substance. In the cases where improvement of the allergic state followed tonsillectomy, a review of some of the operative protocols disclosed that an unusual amount of infective material had been present in the tonsils.

In cases where relatively healthy tissue had been removed, a larger percentage of failure to relieve the allergic state was noticeable. Regardless of what explanation can be of-

stated from this tabulation that tonsillectomy for purposes other than allergy in allergic individuals is about one-half as effective as in normal individuals, regardless

CHART III. COMPARISON OF RESULTS OF TONSILLECTOMY AND ADENOID-ECTOMY ON NON-ALLERGIC CONDITIONS FOR WHICH THE OPERATION WAS PERFORMED.



ferred, the failures decidedly outnumber the beneficial results of tonsillectomy in this series.

II. Effect on Conditions Other Than Allergy

Considering that in allergic patients tonsillectomy is often performed for conditions other than allergy, a tabulation of such conditions in relationship to tonsillectomy was made. Through the investigation of Kaiser,⁴ who stated that out of over 5,000 complaints 28 per cent were not improved within one year, we are in a position to compare the results obtained in the individual complaints between allergic and normal individuals. For those conditions where our data were deemed sufficient, namely, sore throats, nasal and bronchial catarrhs, adenitis, joint disease, and aural infections, a graphic representation of the effect of tonsillectomy in the allergic, pre-allergic, and the control group is made in Chart II. The term "pre-allergic" is used here, in contradistinction to the term "allergic" for those patients who had no definite allergic manifestations at the time of operation, but developed them subsequently. The striking feature in this chart is the decidedly lesser percentage of relief of sore throats, nasal and bronchial catarrhs, joint disease, and aural infections, as compared with the control group of Kaiser.⁵ In fact, it could be

of whether allergic manifestations had, or had not, been present at the time of operation.

Adenitis is perhaps an exception to this fact since a large percentage of failures was noted in Kaiser's group, while in our cases the results obtained do not differ materially from those of other conditions. Sluder,⁸ however, questioned the data of Kaiser on adenitis and cited a larger percentage of improvement in his statistics.

Since relatively often in our series even apparently non-allergic conditions became aggravated by tonsillectomy, Chart III shows the percentage of aggravation of the non-allergic condition in both the allergic and the "pre-allergic" groups. However, only those cases seemed to be unfavorably influenced by tonsillectomy as were probably related to allergy, such as bronchitis, "colds," and sore throats. It is again noted that the improvement in the non-allergics (72 per cent) is twice as great as that of either the allergic or the "pre-allergic" group.

III. Effect of Age on Results

In evaluating the effect of tonsillectomy, it was considered that the age of the patient might be of significance. The results in the different age groups were charted in Graph I, which reveals that up to fifteen years of

age the improvement due to tonsillectomy was decidedly more pronounced than in the older patients. Probably the most outstanding fact is that the allergic condition was

GRAPH I. EFFECT OF TONSILLECTOMY AND ADENOIDECTOMY ACCORDING TO AGE.



not favorably influenced in any one case after the age of twenty years. As far as the non-allergic conditions are concerned, there was a decidedly greater percentage of improvement in the lower age groups, particularly below fifteen years of age. In the pre-allergic group the results were more favorable than in the allergic.

IV. Onset of Allergy Following Tonsillectomy

Bullen¹ pointed out that allergy developed earlier in life in tonsillectomized individuals than in the non-tonsillectomized ones. Thirty-three per cent of his patients on whom tonsillectomy was done had their first allergic symptoms at the time they reached the age of five, and 66 per cent at the age of fifteen. In the unoperated group, on the other hand, only 40 per cent had symptoms at the age of fifteen.

Since the onset of asthma and hayfever has in several instances closely followed tonsillectomy, we charted the time relationship between the date of tonsillectomy and the onset of the allergic state. In 14.4 per cent

of our "pre-allergic" group, manifestations of allergy were found to start within three months after operation. In 48.6 per cent symptoms were noted within two years after operation. In this analysis (Chart IV) it is of special interest that patients with "colds" and bronchitis were particularly prone to develop asthma or hay-fever soon after tonsillectomy, namely 26 per cent within three months and 63 per cent within two years. This higher percentage may be interpreted in two manners: Either the allergic identity of such "colds" is more readily diagnosed after the tonsillectomy has failed in its purpose, or the allergic condition actually becomes more pronounced after the removal of protective lymphoid structures.

V. Specialist Versus General Practitioner

The opinion may be held that tonsillectomy may not be successful because it may have been improperly performed and some of the infectious tissue may still remain. In the reasonable assumption that an otolaryngologist is better qualified to perform this operation than the general practitioner, Chart V compares the results between the otolaryngologist and the general practitioner. In the cases with already existing allergy, the results are almost identical, while in the "pre-allergics" only a slight difference is noted. While it must be considered that the specialists are usually confronted with a more difficult group of operative cases, the close similarity of results leads one to rule out the technic of operation as an important factor.

TABLE I

Results following tonsillectomy and adenoidectomy	Total Number of Cases Exact Data Obtained	Operation Performed During Hay Fever Season*
Aggravation of allergic condition	8	7 (87.5%)
Development of allergy within one month	12	10 (83.4%)
Improvement of allergic condition	3	0
No apparent change of allergic condition	47	22 (47%)

*Includes May 23 to July 15 (Grass pollen) and August 15 to October 1 (Ragweed pollen).

VI. Season of Year

Many clinicians believe that tonsillectomies in allergics should not be performed during the hay-fever season. An analysis

Summary

1. Of 1,112 patients with hay-fever and asthma, 433 had had tonsillectomy, namely 228 before the onset of allergic symptoms

CHART IV. ONSET OF ALLERGY FOLLOWING TONSILLECTOMY IN 228 CASES.

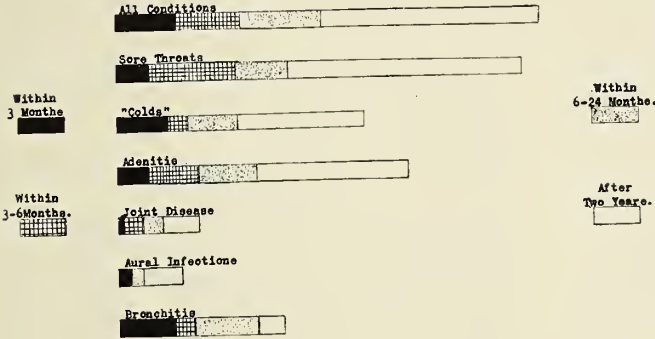
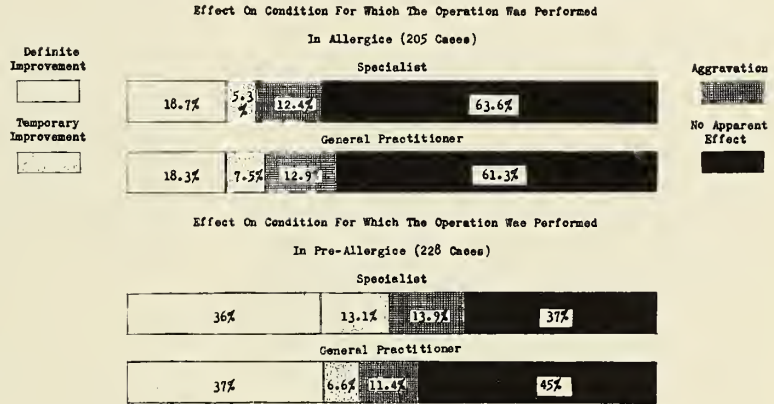


CHART V. COMPARISON OF RESULTS OF TONSILLECTOMIES BY OTORHINOLARYNGOLOGISTS AND GENERAL PRACTITIONERS.



of cases which either developed the first allergic manifestation shortly after the operation or sustained an aggravation of existing allergic symptoms showed that in the "pre-allergic" group, twelve patients were able to furnish the exact data as to the date of operation and the onset of allergy. Ten, or 83.4 per cent, were operated upon during the hay-fever season. In the "allergic" group, sixty-two patients were able to furnish the exact date of operation. Eight patients sustained aggravations, and all, but one, were operated on during the hay-fever season. Of the three who showed improvement of their allergic symptoms, none was operated on during the hay-fever season.

("pre-allergics"), and 205 after allergic manifestations had developed.

2. In the 205 allergic individuals, tonsillectomy resulted in 1.9 per cent definite relief, 1.9 per cent temporary relief, and 11.6 per cent aggravation of the allergic symptoms. In a control group of sixty patients in which tonsillectomy was performed after they had been under our care, the results were substantially the same, 1.7 per cent definite relief, 3.4 per cent temporary relief, and 10 per cent aggravation of allergic manifestations.

3. Tonsillectomy, when performed for conditions other than allergy, was successful in 35.2 per cent of the allergic group, in 36.4 per cent of the "pre-allergic" group as

compared with 72 per cent improvement recorded in normal controls (Kaiser).

4. In 228 patients in whom tonsillectomy was performed before the onset of allergic symptoms, 14.4 per cent developed allergic manifestations within three months, 29.3 per cent within six months, and 48.6 per cent within two years after operation. This compares with 26 per cent showing frankly allergic symptoms within three months, 47 per cent within six months and 63 per cent within two years in patients whose tonsils were removed for the relief of "nasal colds" and "bronchitis."

5. Most benefit of tonsillectomy was obtained in the earlier age groups. The operation was practically always a failure in patients above twenty-five years of age.

6. Tonsillectomy performed by specialists gave similar results as when performed by a general practitioner. This may be taken as an indication that its effect does not depend upon the efficacy of technic of removal.

7. The operation was less successful when performed during the pollen season.

Conclusion

On the basis of these results, a definite criterion as to the indications for tonsillectomy in allergic patients is difficult to establish. There is no question that the patient's age and the season of the year should be

carefully considered before operation. The state of the tonsils is of paramount importance. Although the results of tonsillectomy recorded here are rather disappointing, we believe that there is a definite group of cases where tonsillectomy should be performed, namely, those in whom we are dealing with true frequent infections. In others with allergic upper respiratory catarrh, which may, or may not, involve the tonsils, we believe that tonsillar tissue is a definite asset to the system, which should be preserved.

10 Peterboro

Bibliography

1. Bullen, S. S.: Effect of tonsillectomy in allergic conditions. *Jour. Allergy*, 2: 310-315, (July) 1931.
2. Bullen, S. S.: In Kaiser: *Children's Tonsils In or Out*. J. B. Lippincott Co., Philadelphia, 1932.
3. Hutchison, R.: Asthma in childhood. *Brit. Med. Jour.*, 1:783-784, (April 30) 1927.
4. Kaiser, A. D.: Effect of tonsillectomy on general health in 5,000 children. *Jour. A. M. A.*, 78:1869-1873, (June 17) 1922.
5. Kaiser, A. D.: *Children's Tonsils In or Out*. J. B. Lippincott Co., Philadelphia, 1932.
6. Peshkin, M. M.: Asthma in children, incidence and significance of various diseases and infections, and of tonsillectomy and adenectomy. *Am. J. Dis. Child.*, 33: 880-894, (June) 1927.
7. Scheppegegrell, Wm.: *Hay-Fever and Asthma*. Lea and Febiger, Philadelphia, 1922.
8. Sluder, G.: *Tonsillectomy*. C. V. Mosby Co., St. Louis, 1923.
9. Stout, P. S.: Nose and throat observations in examination of patients with bronchial asthma. *J. A. M. A.*, 89:868-869, (Sept. 10) 1927.
10. Strobl, A., and Wasitzky, A.: Über den Gehalten Komplementbindenden Anti-Körpern in Menschlichen Organen. *Klin. Wchnschr.*, 12:1453-1454, (Sept. 16) 1933.
11. Waldbott, G. L.: So-called "thymic death." VI. The pathologic process in thirty-four cases. *A. J. Dis. Child.*, 47:41-60, (Jan.) 1934.
12. Waldbott, G. L., and Anthony, G.: So-called thymic hyperplasia: IV. A follow-up study of thirty cases. *Am. J. Dis. Child.*, 47:34-40, (Jan.) 1934.

HISTORIC SIDELIGHTS ON MEDICAL TERMINOLOGY*

HAROLD C. MACK, B.S., M.D., F.A.C.S.†
DETROIT, MICHIGAN

One of the most interesting aspects of the history of civilization is the development of consecutive thinking out of the organization of language from primitive speech, upon which the whole process was dependent and consequent. For the student of history and human nature there is no document more revealing than a dictionary—no document more replete with beauty, humor and human fallibility. "When I feel inclined to read poetry," said Oliver Wendell Holmes, "I take down my dictionary—Bring me the finest simile from the whole range of imagina-

tive writings, and I will show you a single word which conveys a more profound, a more accurate and a more eloquent analogy."

Whatever theory we may accept as to the origin of language, none will deny that the governing principle in word formation is emotion and thought. The overthrow of old ideas and the development of new orders based on new attitudes of mind constitute human progress. Yet language presents a

*Read before the Detroit Medical History Club.

†Dr. Harold C. Mack is a graduate of the University of Michigan Medical School, 1925. He specializes in gynecology and obstetrics and is assistant surgeon to the Department of Obstetrics and Gynecology, Harper Hospital; consultant in obstetrics, Herman Kiefer Hospital; instructor in obstetrics, Wayne University College of Medicine. Dr. Mack is also a diplomate of the American Board of Obstetrics and Gynecology, as well as a Fellow of the American College of Surgeons. He is a member of the Medical History Club of Wayne County, a group comprising twenty-five members who have banded together with the object of intensive study of various phases of medical history.

curious paradox. Though new words are constantly being formed, their roots are ancient, and, when analyzed, are often strange and incompatible. More often, however, instead of building anew, the old words gradually take on fresh meanings. Indeed, their very use literally implies acceptance of discarded theories. Words, albeit inferentially the expressions of ideas, more often degenerate into mere labels in actual usage.

In tracing the origins and ultimate meanings of words in common use today we come upon many curious and interesting relics of ancient truths and superstitions, many beautiful thoughts in simile and metaphor, attesting to the accurate insight of our forbears—and to many astounding fallacies. The etymology of modern words discloses facts stranger than fiction, many images of rare poetic beauty, for language, said Emerson, is "fossil poetry." "Examine language," said Carlyle, "What is it all but metaphors, recognized as such, or no longer recognized; still fluid and florid, or now solid grown and colourless?" "In common speech," said Santayana, "we find such ancient bits of wisdom embedded—words are at best the tombs of ideas, and the most conventional formulas of poets or theologians are still good subjects for the archeologist of passion."

Influences of Ancient Mythology and and Medicine

The ancient belief that both disease and cure were of divine origin, and the fact that the healing art was practiced to a large degree by the priesthood, have left a permanent stamp upon medical terminology. So the word *plague* (from *πληγή*) (*plege*), according to derivation means "blow" or "stroke" and implies that the epidemic is an expression of the wrath of angered gods. Early medicine, thus intermixed with Hellenic and Roman mythology, has its beginning, not with Asclepius, but with the sun-god Apollo, himself, who as Pæan, is the divinity who visits men with diseases and at the same time wards off evil and brings help to mankind. He was constantly referred to as "the Healer," and from songs sung in his honor we derive the word *pæan*, while the *peony* owes its name to

the belief that he healed wounds by means of its root. Æsculapius, the son of Apollo, and the best known of the divine healers is commemorated in *Asclepias*, the botanic name of the milkweed. His daughters, *Panacea* and *Hygeia*, the goddesses of healing and health, give us, respectively, the terms for the still undiscovered though oft-proclaimed cure-all, and the science of health. Venus or Aphrodite, the goddess of love and beauty, is invoked in *aphrodisiacs* and condemned in *venerical* as it applies to disease, while a portion of the female anatomy, the *mons veneris*, is dedicated to her memory. Her son, Eros or Cupid, is the god of love whose wantonness is commemorated in the terms, *erotic* and *crotomania*. His greatest love was Psyche, the personification of the human soul, whose name gives us a long list of words, such as *psychiatry*. From Priapus, the god of fruitfulness, and, as might be expected, the son of Venus, we derive the term *priapism* which Johnson defined simply as "preternatural tension," an affection which a glance of Proserpina also bestowed upon Hermes or Mercury, the messenger of the gods, and which caused his statue and turgid genitalia to be worshipped at wayside shrines, called *hermes*, by the sterile or sex-conscious members of the opposite sex. This wingfooted messenger of the gods carried as his emblem the *caduceus*, which is commonly but erroneously considered the emblem of the healing art, because of its superficial resemblance to the staff and serpent, which has been symbolic of healing since the origin of the myth in which a serpent rescued Æsculapius from a therapeutic impasse by bringing him at a psychological moment a life-restoring herb. The functions and characteristics of Hermes show how inappropriate is the use of his emblem by physicians. He might, however, be construed to bear a remote relationship to the therapeutic aspects of medicine through the fact that *mercury*, or quicksilver, derives its name from the fleetness and agility of Hermes (Mercury), although it seems a little unfair to invest this already overburdened and ubiquitous god with the responsibilities of anti-luetic treatment. The *mercurial*, or light-hearted and fickle person is said to possess the qualities of inconstancy and changeableness characteristic of

both the metal and the god. His son by Aphrodite, *Hermaphroditus*, becomes the name of a medical curiosity, the *hermaphrodite*, which suggests how the body of this youth was united by the gods with that of the nymph Salmacis, who had tried in vain to win his affections. The Egyptian god Thoth, called Hermes Trismegistus by the Greeks, was credited, among other things, with the origination of alchemy and is thus commemorated in the process of *hermetic* sealing. Hypnus, Morpheus, and Somnus, the gods of sleep and dreams, survive in the terms *hypnotic*, *morphine*, and *somnolence*. From Saturn comes the word *saturnism* for lead poisoning, and *vulcanized* rubber calls to mind the forge of Vulcan. Narcissus, the unhappy youth who fell in love with his own image reflected in the water, gives us a designation for the self-fixation complex known as *narcissism*, while the *Œdipus complex* recalls the incestuous marriage between Œdipus (so-called because of his edematous feet) and his own mother. The story associated with the term *tendo achillis* is too well known to require repetition. From Iris, the personification of the rainbow, we derive the name for the blue flag, the radix of which is a well known purgative and emetic, as also the name for the pigmented membrane behind the cornea. The first cervical vertebra or Atlas, which supports the skull, recalls the punishment inflicted upon the famous Titan of the same name who made war upon Zeus, and, being conquered, was condemned to bear heaven upon his head and hands. The drug *atropine*, derived from the genus *Atropa*, the name given to the most "inflexible" (*Ἀτροπος*) (*Atropos*) of the three Fates, whose office it was to cut the thread of life, suggests that through this poisonous fruit or plant her dread functions could be easily performed. Even the lascivious natures of the nymphs and satyrs are perpetuated in the words *nymphomania*, the *nymphæ*, or labia minora, and *satyriasis*, or inordinate sexual desire in the male. *Hymen*, the god of marriage, is remembered only by a delicate membrane in the virgin, supposed to be ruptured on the wedding night. Even the *tartar* upon the teeth refers to the Hades of mythology, in the light of Paracelsus' statement that the basis of all diseases was a thickening of the juices

and the formation of earthy matter called Tartarus, because it burns like the fire of hell! A more probable derivation would be from *tartarum*, meaning "dregs," since tartar is formed like the sediment in wine casks. In *nightmare* we still have the spectre of the Norse demi-god, *Mara*, who was said to strangle people in their sleep. Cicero stated quite wisely that "the art of medicine has been consecrated by the invention of immortal gods."

Words Derived from Worship

Many rituals of worship have left their marks upon the language. Thus *Καθάρμα* (*Catharma*), related to the modern *cathartic*, meant the rejects of a sacrifice or what is thrown away in the ritual of purification. Metaphorically it implied a cast-away, outcast, or worthless fellow, the usage deriving from the Athenian custom of throwing certain worthless fellows, in time of plague or famine, into the sea, or more commonly flogging them, saying *περιψημα ημων γενου* (*peripsema hemon genou*) in the belief that this would cleanse away or wipe off the guilt of the nation. Another name for the scape-goat was *Φαρμακος* (*Pharmacos*), whence *pharmacist*. The word *Φαρμακος* (*Pharmacos*) became a general expression of reproach, like *Καθάρμα* (*Catharma*), since he was generally a worthless fellow or criminal who was sacrificed or executed as an atonement or purification for others. Another meaning of the same word was that of poisoner or sorcerer, so that the modern *pharmacist* has little reason for pride in reflecting upon his etymological heritage. Nor is the word *physician* spared in this process of digging up etymological skeletons. The Greek word *Φυσικος* means pertaining to nature or growth (*Φυσις*) (*physis*). The *Φυσι*, *physici*, were not physicians in the modern sense but natural scientists; and as such scientists understood medicine, the science most appreciated by the people, the word finally came to be applied to medical practitioners alone. During the early centuries of our era, however, the *physici* were sorcerers, and *physic*, *τα φυσικα* (*Ta physica*), meant drugs of magic origin. The word *anathema*, which now implies a curse, had originally quite the opposite signification. *Anathemata* were votive offerings,

usually models in gold or silver of diseased legs, feet, or deformed limbs consecrated to the gods in the temples by the devotion of patients who had received benefit from the prayers to the deities worshipped therein. Filtered through ecclesiastical history, the term was modified to signify a curse or *ανα-αναθημα* (ana-anathema), but later reverted to its original form, while retaining the sense of curse instead of blessing.

That pilgrims in large numbers flocked to these temples we may be sure, for Pliny and Dioscorides attribute to pilgrimages to the temple of Jupiter Ammon the discovery of *ammonia*, which Johnson described as "a native salt, generated in those large inns where crowds of pilgrims, coming from the temple of Jupiter Ammon, used to lodge; who traveling upon camels, and those creatures in Cyrene, where that celebrated temple stood, urining in the stables, or in the parched sands, out of this urine which is remarkably strong, arose a salt, denominated sometimes from this temple *ammoniac*, and sometimes from the country, Cyreniac."

Names of Regal Origin

From divine to temporal rulers is not a long leap in the study of verbal origins. At least four words of regal implication should be noted. *Valerian* is said to honor the Roman emperor of this name. To Gentius, king of Illyria, according to Pliny, we must credit the discovery of the *gentian* and its tonic properties (2 Cent. B. C.). The Cæsarean section is commonly thought to bear the name of Julius Cæsar, although Williams' explanation for the term would seem more plausible: "The origin of the term has given rise to a great deal of discussion. It has been generally asserted that Julius Cæsar was brought into the world by this means and obtained his name from the manner in which he was delivered (*a cæso matris utero*). This explanation, however, can hardly be correct, as his mother Julia lived many years after her son's birth; and besides, Julius was not the first of his name, since there is mention of a priest named Cæsar who lived generations before. In the Roman law, as codified by Numa Pompilius, it was ordered that the operation should be performed upon women dying in the last few weeks of pregnancy in the hope of saving the child. This *lex regia*, as it

was called at first, under the emperors became the *lex cæsarea*, and the operation itself became known as the cæsarean operation." The fourth word, *cinchona*, commemorates a more recent royal person, the Countess of Chinchon, wife of the viceroy of Peru, who was cured of malaria by the Peruvian bark containing the drug now known as quinine.

Influences of Philosophies and Superstitions

Philosophers, too, had their influence upon the origin of words, and it would appear from the persistence of the superstitions concerning "lucky" and "unlucky" numbers, that Pythagoras was the most influential of all. It was he who said that "number is the essence of everything," and it was his system of numerology which has bequeathed us such terms as *climacteric*, *crisis*, and *critical*, although their modern use deviates somewhat from the original conception. The word *climacteric*, now synonymous with menopause, is derived from the Greek *κλιμακτερις* (*climakter*), which means "round of a ladder" and which was employed by the Pythagoreans to signify a definite or *critical* period of a man's life, a point at which the person was supposed to have been especially liable to change in health or fortune. According to some, all years denoted by multiples of seven were climacterics; others admitted only the odd multiples of seven; some included only the odd multiples of nine. The "grand climacteric" was considered to occur at sixty-three years (9x7) or at the eighty-first year (9x9). Numbers played an important part in the religion of the Chaldeans, Egyptians, as well as the Israelites (Exodus xxx, 2). *Crisis* and *critical*, from *κρίσις* (*crisis*), referred to the *odd* days as if on these a judgment [*κρίνω* (*crino*), I judge] was to be formed concerning the patient. Even Hippocrates was accustomed to be apprehensive of relapse if the fever abated on other than an odd day, and, like others of his time, he believed that the critical days were influenced by the moon. The adjective *critical*, now implying a precarious condition of a patient, and the customary use of the term *crisis* to denote a sudden recession of a fever, as compared to a gradual remission by lysis, reflect a happy release of the medical profession from an ancient superstition.

The persistence of the astrological super-

stition even to the present day recalls once widely held theories of disease attributed to sidereal influence. They have left their marks on the language. Thus the words *disaster* and *ill-starred* imply unfavorable astral influence; *lunacy* (luna; moon) and *mania* (from *μην* (men), "moon")—whence also menses, are a consequence of being "moon struck." The *joyial* person smiles under the protection of Jupiter (Jove), just as he of the *saturnine* countenance reflects the frown of Saturn. Dürer's woodcut of the "First Syphilitic" bears the date 1484 in the Zodiac over the Coat of Arms of the City of Nuremberg. This has been interpreted as the "ill-starred" date when syphilis first appeared in this city. Every *consideration* (con + sider) involves consulting the stars. *Phosphor*, the morning star, or light-bearer, gives us the name of a *phosphorescent* chemical. The Italian word, *influenza*, designates a disease supposedly due to the *influence* of the stars. While the epidemic of 1918-1919 is commonly called Spanish influenza, it is reasonably certain that it did not come from Spain. This designation is the result of an inveterate and almost universal custom to call disease by a name indicating its origin in the land of the hated foreigner, or as a visitation of a malign deity. "The latter conception gives us," says Riddell, "Lues deifica or divina (epilepsy), the former made the French speak of Lues Neapolitana or Mal de Naples; the English of the same disease, as Lues Gallica, Morbus Gallicus or French Pox; the Italians, the French Disease; the Russians call influenza Chinese catarrh; the Germans, Russian pestilence; the French, Italian fever, or Spanish catarrh. In the War of 1812, the Americans called the 'Cold Plague' (almost certainly a malignant type of influenza with pneumonic complications) the Canadian Fever; and but the other day we had the Spanish flu, which is no more Spanish than German measles are German. Perhaps the most amusing example of the tendency to call disease after those who are disliked, is that in President Jackson's time in the United States, the Whigs and 'Tyler Democrats' called influenza 'Jackson's Itch,' while Jackson's partisans called it 'Tyler's Grippe.'" The name "La Grippe," incidentally, is derived from the word "grippe," to seize, the reference being to the "gripe" on the throat in the disease. That no nation cares to claim dis-

ease as its own invention is apparent from the foregoing examples. Voltaire condemned this practice when he said: "The pox, like the fine arts, owes its origin to no particular race."

Relics of the Humoral Theory

Older ideas concerning the human constitution have left behind them words which still serve to bring back memories of early stages of knowledge and belief. The humoral theory has contributed many terms still in common use, though with altered meanings. This theory supposed that the body is composed of solids, liquids, and aeriform substances. This belief in the aeriform substances called "spirits" has left behind its vestiges in such phrases as *high spirits*, *animal spirits*, *spirited*, and the like. The liquid elements of the body were called "humors," and were supposedly four in number: blood, phlegm, bile, and black bile. The *temperament* (L. temperare, "to mix") of a person was supposed to depend upon a mixture of these humors, and was described as *phlegmatic*, *sanguine*, *bilious*, or *melancholy*, according as one or the other of these humors predominated. Health was believed to depend upon the proper *krasis* of these humors, *κρσις* (crasis) being the Greek word for "mixture." Thus the term *dyscrasia* means an improper mixture of the humors, the opposite of what is implied in the word *temperament* (L. temperamentum), in which the proportions are properly compounded; thus also the words *distemper*, *bad temper*, and *good temper* derive their meaning. The word *temper* has now been most frequently restricted to the meaning of "ill temper." *Complexion*, meaning literally "weaving together," was another term applying to the combination of humors; its use has been shifted to mean the hue of the skin, the external sign of the complexion taken in its original meaning. Oddity in a person was associated also with the idea of dominance of one of the humors. Hence the early use of the noun *humor* and the derived adjective, *humorous*. In later English the word *humor* has been shifted so as to apply to a quality in the thought or language of a humorous person. When the laity use the term "salt rheum" to describe a type of eczematous eruption they imply the existence in the blood of a salty humor, the word *ῥέυμα* (rheuma) meaning a humor, just as

rheumatism [from ρευματίζω (rheumatizo)] meant originally "full of humors." The word *gout*, derived ultimately from the Latin "gutta," a drop, was adopted in the Middle English period from the French, but was applied to dropsy and catarrh as well as gout, all of which were presumably due to a defluxion of the humors. The word *carminative*, from the Latin "carminare," to card or comb, is another relic of this theory. The objects of carminatives is to expel wind, but the theory had it that these drugs dilute and relax the gross humors, from whence the wind arises, combing them out like knots of wool. The term *morbilli* for measles implies a disease of the bile, and one explanation for the origin of the word *calomel* indicates its efficacy in *melancholy* states, viz.: quod *nigro* humori sit bonum, a good (καλός) (kalos) remedy for black (μελᾶς) (melas) bile. This theory derives much support from the black appearance of the stools, which is usually produced by the use of calomel, and which was erroneously attributed to the searching and efficacious nature of the purgative. [Another explanation of the origin of the term calomel states that Sir Theodore Mayerne, who introduced its use in England, gave the name to it in consequence of his having a favorite black servant who prepared it. It seems more probable that the word calomel was derived from the change of color which the drug undergoes from black (μελᾶς) (melas) to white (καλός) (kalos) during its preparation.] Whatever the disease which plagued the poor patient, physicians readily explained its genesis as "a mutiny of the humors." Le Sage, in *Gil Blas*, describes a tragico-comic instance in which the patient lost his life as a consequence of a dispute among his physicians on the question whether the Hippocratic expression *orgasmos* meant a fermentation or concoction of the humors.

Ancient Notions of Physiology

Older conceptions of physiology regarding the seat of the various emotions survive in the use of the names for parts of the human anatomy. *Heart* and its derivatives are associated with the warm affections. *Courage*, *cordial* and their like, which go back to the Latin, cor, "heart," originate in the same conceptions. Spleen and splenic are associated with ill temper, *kidney*

with temperament in general, *stomach* with feelings as various as pity, courage, pride and wrath. *Pluck*, a butcher's collective term for heart, liver, and lungs, has been associated with the idea of courage, a use of the word strikingly paralleled in the present use of the term *guts*, as synonymous for stamina; the use of *pluck* in the conversation of the drawing room was once viewed with much the same askance as the word *guts* is today. The term *hysteria*, now applied to both sexes, originally implied that this emotional state had its origin in a uterine (ὑστέρᾶ, hysteria, the uterus) disorder. It is interesting to note that the Greek word *phren*, meaning "mind," goes back to an earlier meaning, "diaphragm" or "midriff." The early 19th century inventors of the science or pseudo-science of phrenology, quite unintentionally, it must be presumed, brought their science into association with a discarded system of primitive thought regarding the seat of the human intelligence. In a like manner the *pituitary* gland derives its name from the designation of Vesalius, who described it as the "glandula pituitam cerebri excipiens" on the supposition that it secreted the *mucous* discharges of the nose. The nomenclature of the brain also shows how ideas may influence language. Since the founders of anatomy believed that the encephalon contained homologues in miniature of all parts of the body, both male and female, text-book descriptions of the brain contain such terms as *brachia*, arms; *crura*, legs; *corpora geniculata*, knees; *corpora mammillaria*, breasts; five *ventriculi*, stomachs, one of which was in ancient times called *utriculus*, or womb. There are also a *vulva cerebri* (anterior opening of the third ventricle); *nates*, buttocks; *testes*, testicles; *clava*, penis; *flocculus*, a vulgar name for the pubic hair; the *velum interpositum*, veil, and a marriage bed or *thalamus*. With all this procreative apparatus duplicated within the body it is not surprising to find a union, or *fornix*, and numerous offspring, the quadruplet "brain children" known as the *corpora quadrigemina*.

Onomatopœia, Simile, and Metaphor

How the meaningless grunts of the primitive savages were ultimately transformed into words is well shown in Karl Pearson's "Chances of Death." In the chapter, "General Words for Sex and Kinship," Pearson

gives the earliest known Sanskrit routine words, from which one may imagine what basic ideas first entered the primitive minds through the medium of language. Onomatopœia, or sound imitation, played a large part also in primitive word formation. A curious demonstration of this process may be seen from the fact that all common words pertaining to the nose begin with the sound *sn*. The following examples will illustrate this fact: snaffle, snarl, sneer, sneeze, sniff, snivel, snore, snort, snout, snuff, snub-nosed, snicker, snob, snooze, snot, etc. When we wish a person to *stand* we instinctively say *st*. This sound is found as the root of words expressing the idea of immobility in all Indo-European languages: Aryan *sta*, Greek, *στημι* (*histemi*), Latin *stare*, German *stehen*, et cetera. The words hiccup, cough, cackle, crackle, and many others further illustrate this imitative tendency. Among the first cries of the infant on his entrance into the world is *ma-ma*, and, as his lamentations cease when applied to his mother's bosom, our imaginative ancestors employed the word *mama* as the name for the female breast, and later used it as a designation for the mother herself. Curiously enough—and this might be construed as evidence that the mammary glands of the male were not always merely ornamental—the words *papa* is closely allied to the word *pap*, an obsolete term for the breast of either sex, now used most commonly to signify an infant food; in the negro dialect "pappy" designates the father himself.

Metaphorical Words

Another fundamental factor in word formation is to name things on the basis of their likeness in form or quality to known and named objects. Language contains no figures more striking than those based upon similarity—similes and metaphors. "Language," said Jean Paul, "is a dictionary of faded metaphors." This is particularly well shown in medical terminology. In *scrofula*, for example, the neck of a child often swells until it resembles that of a pig, *scrofula* in Latin meaning "a little pig." Alopecia, a designation for patchy baldness, is said to have arisen because foxes (*αλωπηξ*, *alopex*, the fox) have patchy bald areas caused by mange. Another view is that it came from an old saying: "No grass grows

where the fox urinates." The derivation of the term *tinea*, literally, "moth," is well-described by Bartholomew in his popular mediæval encyclopedia: "also the head is diseased often with a familiar affection that affects children particularly and we call that evil tinea, that is a moth, for it fretteth and gnaweth the over part of the skin of the head as a moth that fretteth clothes and cleaveth thereto without departing and holding the skin right fast and such an evil breedeth passing great itching and fretting and clawing." This same author gives an equally graphic description of the disease known as favus, which literally means "honey comb": "The head is grieved especially on the outside in the skin with pimples and scabs out of which cometh matter much like honey, and therefore Constantine calleth such a scab favum, or honey comb, for such sores have small holes out of which matter cometh as honey out of a honey comb." *Cancer* and *carcinoma*, the Latin and Greek terms respectively for crab, derive their designation for neoplasm, according to Galen, from the swollen veins which bear a resemblance to the legs of a crab. An obsolete use of the term carcinoma to denote a disease of the cornea is described in Chambers' Cyclopedia (1753) as a condition in which "the little veins of the part appear turgid and livid." *Carcinoma* was also used, according to Suetonius, as a term of reproach by Augustus to Julia and her son Agrippa on account of their incorrigible wickedness. *Croton* and *ricinus*, the Greek and Latin words respectively for the castor oil plant, are named from the resemblance of its seed to the dog louse; *ergot* is named from the resemblance of the rye fungus to a cock's spur. The term *lupus* for skin tuberculosis derives its name from the Greek *λυπη* (*lupe*), meaning "pain," rather than from the Latin *lupus*, meaning "a wolf."

Metonymy

A few of the numerous instances in which names are derived from resemblance to inanimate objects should be mentioned. Thus, the *vomer* is "the ploughshare," the *tibia*, "a flute"; the *clitoris*, from the Greek *κλεις* (*kleis*), "a key," is the door tender. A *carbuncle*, a Latin word meaning a "little live coal," was applied first to a bright and sparkling red gem. The *phalanges* resemble the wedge-shaped Greek army units (*φаланξ*).

(phalanx) in battle formation. *Torcular Herophili*, the "wine press of Herophilus," applied to the confluence of sinuses, describes the flow of blood red wine from the press of that famous Greek physician who is said to have been the first vivisectionist; he was accused even of vivisectioning condemned criminals. *Bacillus* and *bacterium*, the first Latin, the second Greek, both mean "a little rod." Modern bacteriology differentiates these terms although etymologically they have identical meanings.

Not only physical but also physiological properties, particularly those of drugs and plants, are the basis of descriptive terms. Thus *belladonna*, an Italian word meaning "fair lady," is applied to the plant known by that name for variously ascribed reasons. According to Pultney (1757) it is so-called "because the Italian ladies made a cosmetic from the juice," and Hamilton (1851) has it that the name is such "because it was employed by Leucota, famous poisoner of Italy, to destroy beautiful women." Still another explanation by Moore (1866) is that the name was given from the charmingly blended red and white of the perianth, resembling the complexion of a beautiful woman. Cynical Ambrose Bierce ("The Devil's Dictionary") records the following: "Belladonna, *n.* In Italian a beautiful lady; in English a deadly poison. A striking example of the essential identity of the two tongues." *Ipecac* describes the emetic properties of *ipecacaguen*, which, in the language of the Brazilian Indian, means "the smaller roadside sick making plant." *Digitalis* is a name coined by the German botanist Fuchs because of the resemblance of its blossom to a thimble, the Latin for which is *digitale*. The word *paregoric* describes the soothing effect of this drug; it is derived from the Greek words, *παρα* (*para*), "besides," and *αγορα* (*agora*), an "assembly," and visualizes the effect of the silver-tongued orator who soothes and assuages the passions of the howling mob. *Antimony* is commonly supposed to be derived from the Greek *ἀντί* (*anti*), "against," and the French *moine*, "a monk." This misconception is the result of an idle tale told by Samuel Johnson, who stated that the monk, Basil Valentine, noting the beneficial effects which followed the purgative action of this drug when administered to swine, decided to administer it to his brother monks. The results were fatal

and the drug was thereafter known as a specific "against monks." In this, as in other instances, the Great Lexicographer was in error. He was not aware that this word had been in use at least four centuries before Basil Valentine, since it appears in the writings of Constantine Africanus of Salerno, Chaucer's "cursed monk, daun Constantyn." Probably, like other terms of alchemy, antimony is a corruption of some Arabic word refashioned to wear a Greek or Latin aspect. The *bezoar* stone, the name given to concretions of animal matter in the gastro-intestinal tract, is derived from the Arabic *bezear*, meaning antidote or counter poison, in the belief that it possessed this curative property. This word presents a survival of the old theory that "disease and remedy are found together" since it was commonly thought that every noxious agent contained within itself its own antidote. Thus Rowland (1658) states: "A Hornet is the Bezoar Stone for its own wound." This same idea is perpetuated in the soothing syrup for infants known as *treacle*, which was once supposed to be an efficacious antidote against bites of wild beasts, as we learn from its Greek derivation, *Θηρίον* (*therion*). This "viper wine," as it was sometimes called, had wrapped up in itself the once popular belief (an anticipation of homeopathy) that a confection of the viper's flesh was the most potent antidote against the viper's bite, an allusion to which is contained in the phrase of the poet, Haller: "your vipers treacle yield."

Other examples of metaphorical methods in word formation are seen in terms designating the cause for the effect, the symptom for the disease, the place for the thing, and the name of the inventor for the name of his discovery. Thus, *intertrigo*, "to rub together," designates the disease caused by such friction; *nausea* (literally "ship sickness") is comparable to *malaria*, which means "bad air." In the Hindoo word *beriberi* we have the symptom for the disease; the extremities in this affection become rigid and the patient feels as though he were shackled, hence the name from *beri*, "a fetter." *Lochia*, literally "child-bed," has come to signify a characteristic discharge during the puerperium. *Assassin* dates back to the Crusades. It represents the activities of addicts of the drug *haschish*, or *hashaschins*, as they were called. The

word *obstetrics*, derived from the Latin *obstare*, meaning to "stand by," implies a science of watchful waiting and offers a plea for conservatism very much like that expressed in Sterne's *Tristram Shandy* when he cautions the impetuous man-midwife, Dr. Slop: "Truce! truce, good Dr. Slop: stay thy obstetric hand,—return it safe into thy bosom to keep it warm,—"

Geographic Location

In the class of words reflecting the geographic location of the object when first discovered, we have *copper*, *cuprum*, from Cyprus; *Magnesia* and *magnets*, from Magnesia, a district of Thessaly. *Jalap* comes from Xalapa in Mexico; *colchicum*, from Colchis, in Asia. The practice of *sodomy* commemorates the ill-fated biblical city of Sodom. The *risus Sardonius*, a peculiar grin observed in cases of tetanus, is derived from the tradition that in Sardinia there grew a plant which, when eaten, caused people to die of laughter or at least to die laughing. The science of *chemistry*, or *alchemy*, has been supposed by some to have been obtained by the Arabs from Egypt, the land of Ham, who, according to the Old Testament, was the first settler in Africa. The Egyptian word for Ham is *Chem*i—whence Chemistry, the Hamitic science. The majority of philologists, however, claim that *alchymy* is derived from the Arabic *al*, "the," and the Greek *Χυμειν* (*chymeia*), "pouring or mixing," from *Χεω* (*cheo*), "I pour"; thus they shut off etymological argument in favor of the Egyptian origin of this science, making the word mean the "mixing science," instead of the Egyptian or Hamitic science. This ancient art of the alchemists, incidentally, has also bequeathed us the word *elixir* (*al eksir*), which meant "the philosopher's stone" which many believed would convert baser metals into gold. In searching for this stone they also sought a universal solvent or alkahest, known as the *quintessentia*, or fifth essence; this now survives as a term for purity and perfection (*quintessence*). The belief of the alchemists that metals possess sex has given us the word *arsenic* from *αρσην* (*arsen*), "a male"; silver was feminine and was sacred to Diana, or the moon, *Luna*. This myth has left its influence upon medical practice until only recent times, for nitrate of silver, known as *lunar caustic*, was once admin-

istered to epileptics on the assumption that these unfortunates were under the malign influence of the moon, as were all *lunatics*. It followed as a natural course of reasoning that the moon's metal, silver, must be a specific for all moon blasted patients; this remedy continued until a few years ago when bromides became the fashionable remedy in this affliction. *Clap*, the vulgar word for gonorrhea, is derived from the name of a part of Paris, *Le Clapier*, the word meaning literally, "rabbit burrow." This quarter contained numerous houses of ill fame, and soon the common French word for brothel was *clapise*, hence the name of the disease acquired in such places. From a similar source, the prostitutes of Rome, who were called she-wolves (*lupæ*) and whose houses were known as *lupanaria* (in allusion to the suckling of Romulus and Remus by a she-wolf), we derive, according to Hart, another common word. The chambers of these prostitutes were generally underground and were arched like an alcove (*formix*); hence the derivation of the word *fornication* to designate illicit commerce of the sexes.

Medical Eponyms

Every medical student has often been confused by the common and, to some extent, deplorable practice of naming anatomical regions, disease symptoms, and modes of procedure, from the names of persons who first described them (eponyms). We thus have the fissures of Sylvius, Rolando, and Glasser, the lobe of Spigelius, the foramina of Monro and Thebesius, and many others. *Voltaism*, *Galvanism*, and *Faradism*; the *ampère*, and the *ohm* are named after the discoverers of these electrical phenomena. *Nicotine* commemorates the name of Jean Nicot, who was the first to send tobacco from France to Lisbon, and *pelletierine*, the name of Pelletier, who discovered this teniafuge. *Quassia* derives its name from a Surinam negro, Quassia, who first discovered the curative qualities of the plant which Linneaus honored him by naming *quassia*. *Onanism* commemorates a contraceptive method practiced by Onan (Genesis, 38:9), though he was probably not the first to resort to its use, no more than the swine-herd *Syphilis* could claim priority in contracting the disease which bears his name. *Sadism*, which means sensual delight

in cruelty, is from the Compté (commonly called the Marquis) de Sade, the author of infamous books; *masochism*, a kind of inverted sadism, is named after Sacher Masoch, an Austrian novelist. Another literary light who is responsible for a type of sexual perversion among women is the Greek poetess, Sappho; *sapphism*, or *lesbian love*, refers to the practices current in Sappho's literary society on the island of Lesbos. The verb, *to Burke*, meaning to stifle, commemorates the days before the enactment of anatomical laws and the murderous methods of the famous "resurrection man," Burke, who was hanged in Edinburgh in 1829 for killing people by suffocation in order to dispose of their bodies to medical students. This word is now used only in the sense of "stifling discussion," but in the Ingoldsby Legends it still retains its original sense:

"But when beat on his knees,
That confounded De Guise
Came behind with the 'fogle' that caused all
this breeze,
Whipp'd it tight around his neck, and, when
backward he'd jerk'd him,
The rest of the rascals jump'd on him and
Burk'd him."

The drug *stovain* in a strange manner is said to perpetuate the name of its discoverer, whose name was Fournéau, the French word for *stove*. Medical nomenclature is replete with names commemorating physicians. Some of these uses are somewhat incongruous. For example, *bartholinitis* (literally, "disease of Bartholin") applies to a disease of the vulvo-vaginal glands which he discovered but did not possess. In the same manner, *neisserosis*, or *neisserian* infection, to signify diseases caused by the gonococcus, are unfortunate misuses of the name of the great bacteriologist, Neisser, who discovered the germ. *Mesmerism* is in honor of the Viennese physician who introduced this form of hypnotism. The guillotine derives its name from the Parisian physician who introduced this instrument of death. It was at one time also known as a *louison*, after a Dr. Louis who perfected the mechanics of its construction. Even a modern instrument of destruction, the gangster's "gat," owes its existence and name to an American physician of Ohio, Dr. William Gatling, the inventor of the Gatling Gun. And finally, that popular appliance which Madame de Staël is said to have described

as "a scimitar against pleasure," the *condom*, bears the name, in altered form, of its inventor, Dr. Condon. According to Hyrtl, the word condom is a corruption of Gondom, the name of a cavalier of the court of Charles II.

Many other proper names with a medical background have provided words in common usage. *Sorority*, according to Garrison, is probably derived from Soror, who founded the hospital Santa Maris della Scala at Sienna in 898. *Bedlam*, meaning confusion and uproar, is a corruption of Bethlehem from St. Mary of Bethlehem, a lunatic asylum incorporated in London, in 1547, by Henry VIII. This word remains as a sad commentary upon the treatment of the insane in those times.

Faulty Word Formation

The examples of word derivation cited thus far, illustrate the fact that words are seldom created *de novo*, for in their structure they contain roots and sounds already in use in one form or other. One of the few exceptions to this general rule is the word *gas*, the arbitrary coinage of the Belgian chemist, Van Helmont, in the 17th century. Even this word is hardly a new creation, for we have Van Helmont's own statement that the word *chaos* was vaguely present in his mind, and Campbell has pointed out that *gas* closely resembles *Geist*, the German word for soul. In the coinage of words great care must be exercised to select roots which are applicable. The word *stethoscope*, *στήθος* (*stethos*), "chest" + *σκοπεῖν* (*scopein*), "to look at," is incorrect, *stethophone* being a more proper designation for this instrument. Similarly, the word *asphyxia*, literally "without pulse," does not indicate the actual pathology implied by the term. The word *artery* still perpetuates the erroneous notion that these vessels contain air. In Hippocratic times the word *artery* was more properly restricted to the wind pipe. We still employ the word *gonorrhea*, which means "a flow of semen," from *γόνι* (*gone*), "semen" + *ρῆν* (*rhein*), "to flow"; *blenorhea*, "a flow of mucus," would give a more accurate description.

Changes in Meaning

"Language," said George Moore, "like a coin too long current, becomes defaced." Many words through long and constant us-

age have come to assume meanings quite the reverse of their original sense. Perhaps the most startling changes of meaning are seen in the words now applied to persons of inferior intelligence. Thus *dunce* is derived from the Dunsmen, the followers of that great Schoolman and Franciscan friar, Duns Scotus. This teacher, "the subtle Doctor," as he was called, little deserved to have his name turned into a byword expressing stupidity. The term *idiot* has its origin among the politically minded Athenians. Those who did not hold public office in that city were termed ἰδιῶται (*idiotai*), "private citizens," to distinguish them from office holders. The man, who in time did not have an opportunity to hold public office and serve the state, was looked upon as a person of very inferior mental capacity, so that finally *idiocy* assumed a meaning among the ancient Greeks which we carry to this day. That carrying a cane is an affectation indulged in by feeble-minded "fops" is an opinion not infrequently expressed in this country; it appears to have been the feeling also of those who coined the word, *imbecile*, literally, "leaning upon (*in*) a cane (*bacillum*)."¹ The word received this meaning because many idiots, because of disturbances of the motor apparatus, were obliged to lean upon a cane for support. Since extreme piety and religious zeal are commonly noted in persons of deranged mentality, words expressive of goodness have often taken on contemptuous usages. This is noted especially in words such as *silly*, *simple*, *simpleton*, *dizzy*, *giddy*, and *cretin*. *Silly*, written "seely" in English, is beyond doubt the equivalent of the German cognate "selig" which means blessed. This sense of the word is shown in the lines of an early English poet who described the infant Jesus as "this harmless silly babe." The *simple person*, or *simpleton*, according to derivation, "without fold (*sine plica*)" is now a laughing stock; *duplicity* or double-foldness merits disapproval in another way. The synonymous adjectives *dizzy* and *giddy* in ancient times meant "possessed by a god," a meaning identical with the original meaning of *enthusiasm*. This old significance then changed to imply a general want of sense, and later these words were used to describe the condition in which "one's head swims," although in such phrases as "dizzy

or giddy conduct," "dizzy blonde," et cetera, we revert to the early meaning of foolishness. Similarly the adjective *sapient*, literally "wise," is hardly ever used other than in mockery; hence also the slang expression, "the poor sap." A *cretin* is literally a Christian, the term being derived from an Alpine patois form of *chretien*. This derivation reflects a feeling of contempt for the Christian whose ideal of humility, peace, and self-abasement was supposedly typified by these mentally deficient creatures with congenital absence of the thyroid. In the same manner, the *innocent* person, literally one who "does no harm" (*in nocens*) is considered "harmless" and looked upon in derision.

Another curious change in meaning is shown in the word *alcohol*, which is derived from the Arabic *al*, the definite article, and *kohl*, the very fine powder of antimony. Alcohol in its original use was a term applied to this powder used as a cosmetic "with which the ladies of Barbary tinge their hair and the edges of their eyelids." The term was then used to designate any fine powder produced by sublimation which by later extension included the process of distillation of spirits in the modern sense. The *apothecary* shop originally meant and served as a "store-house"; the ancient (not modern) drug stores were the *confectionarii* and *stationarii* where medicines were compounded and sold. Confectionery and stationery supplies play a large part in the American drug store, though not in the ancient manner. *Migraine*, a vulgarization of *hemicrania*, literally "half-headed," has little etymological bearing except through usage to designate headache; *quarantine*, strictly applied in its original sense, requires isolation for *forty days*; an *asylum*, derived from the Greek word meaning "inviolable" and "free from the right of seizure," through its constant association with *insane* and *orphan*, has come to mean a place of confinement rather than a place of refuge. Thus, also, THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY appears only once a month instead of daily as the word journal implies; and *diet*, from the Greek word meaning "mode of life," has degenerated to imply a prescribed form of eating, inferring, perhaps, that men live to eat, rather than merely eating to live.

Few persons will believe that a *diaper*, except for a very limited period of time, can properly mean "pure white." The modern therapist also will be little flattered to recall that his etymological ancestor (the Greek Θεραπων (Therapon) was originally a slave or menial who waited upon his master. Samuel Johnson, however, must have thought the analogy a close one when, in speaking of the profession of physic, he exclaimed: "It is a melancholy attendance on misery; a mean submission to peevishness; and a constant interruption of pleasure." Few who have listened to long and tedious medical discourses, called *symposiums*, would not welcome a return to the original symposium or drinking party (literally "drinking together") where conversation was stimulating if not always deeply intellectual. Our recent economic upheaval which often necessitated a return to primitive methods of trade and barter for the collection even of medical *fees* recalls the fact that this very word is based upon that method of conducting business. From *pecu*, "cattle," as a unit of value, the Roman said *pecunia*, "money," and we say *pecuniary*; the English word *fee* has the same devel-

opment, since it originally meant "cattle" even as its German cognate *Vieh* still does. The Roman soldier who was "worth his salt" received a *salary* (from *salarius*, pertaining to salt).

This cursory résumé aiming to show the wide variety of interest inherent in the study of language is but a scratch upon the surface of this subject. Many other examples could be cited to illustrate what Byron has called the "poetry of speech" and to trace the development of human thought through the study of words. In "The Mind in the Making," Robinson has shown the reluctance with which the human mind accepts any fundamental change, how tenaciously it clings to outworn theories and prejudices, and how through elaborate modes of rationalization it accommodates itself to change. Words more vividly than anything else reflect this tendency. The very fallacies, however, which they perpetuate provide the greatest sources of interest because they are, after all, human.

"Themistocles said speech was like to tapestry; and like it, when it was spread it showed the figures, but when it was folded up, hid and spoiled them."—*Plutarch*.

THE VALUE OF PAVAEX THERAPY*

HARRY C. SALTZSTEIN, M.D., MAURICE P. MEYERS, M.D., and
SAUL ROSENZWEIG, M.D.
DETROIT, MICHIGAN

Any new therapeutic procedure always evokes interest, and there is always a period of controversy before the pendulum swings to the indication of its true worth. There has not yet been time for this with the passive vascular exercise machine invented by Reid and Hermann of Cincinnati. Many careful students of circulatory diseases are still undecided about its value.

The basic idea of the pavaex therapy is that

"The peripheral circulation can be markedly improved by some method which will alternately and rapidly suck blood into an extremity and force it back toward the heart (Peripheral Heart Apparatus—Reid)."

This they have done by rhythmically alternating the atmospheric pressure surrounding the leg. As Reid and Hermann have repeatedly stated, changes in environmental pressure have been known to be beneficial to the peripheral circulation for over 100 years. In 1932, they devised a

glass boot into which the leg could be placed and within which, by means of a motor, the surrounding air pressure could be both exhausted toward a vacuum or increased above that of the normal air environment. In practice, the controls are set so that a cycle of 80 mm. negative pressure is followed by 20 mm. positive, with two to four cycles per minute, the treatments lasting one-half to one hour, or longer in urgent cases.

Though our experience with pavaex

*From the North End Clinic. Aided by a grant from the Aaron Mendelsohn Fund.

treatment has not yet been extensive we think the following cases interesting enough to report briefly:†

Case 1.—An auto mechanic, aged forty, was referred to the clinic by Dr. A. H. Whittaker. He froze his left hand and right foot on the night of January 23, 1935, while repairing an automobile in the snow. The condition improved, but then, after three months, remained stationery. When first seen, June 25, 1935, he presented the following: He was unable to close the fingers of the right hand. The third, fourth and fifth fingers were chiefly affected; the distal half was stiff, glistening; there was apparently very little subcutaneous tissue. There was an ulcer exposing the bone end on the tip of the fourth finger which scabbed over and refused to heal. The nails of these fingers were trophic; the fourth gone, the others thick, black, curled, half-grown. There was a partial motion of the mid-phalangeal joints, very little motion in the distal joints. There was paresthesia of the third finger.

The left foot showed an identical condition; shiny, skin-and-bone, rigid first, second, third and fourth toes; numb, cold, with atrophic or absent nails.

For the last three months there had been little change. It had resisted physiotherapy, and the man had been unable to secure work because he could not close his right hand, the ulcer on his fourth finger would not heal and he could not walk well.

Pavaex therapy was started June 26, 1935.

Examination, Sept. 12, 1935, after about fifty hours of treatment given one hour each day, showed the following: The right hand could be closed completely, though there was still stiffness of the distal joints. The shiny, tense appearance had gone. The nails had grown about one-quarter inch. There was well felt subcutaneous fat, perhaps two-thirds that of a normal finger. The ulcer on the fourth finger had completely healed. The paresthesia on the third finger had disappeared and there was normal sensation. The toes of the left foot similarly had lost their shiny, glistening appearance and were soft, flexible and he could walk without difficulty.

He went back to work on September 5, washing automobiles eight hours daily, still coming in each morning for his treatment.

Hermann states that one of the chief indications for pavaex therapy is in frost-bite. We have never seen any such condition improve in such a fashion as this man's hand and foot did.

Case 2.—A heavy-set man, aged fifty-seven (weight 216 pounds), has been under treatment in dispensary for several months for varicose ulcer of left leg.

Under repeated Unna's boot and injection of several veins, the ulcer healed. He complained, however, of pain and claudication in both feet, which he had had for 2 to 3 years. It was much worse in the left foot and prevented walking. He would have to stop every half block or so, massage his legs, then walk on. In addition, there were tran-

sient fleeting pains in the bottom of the foot—worse on the left side.

Examination June 7, 1935, showed a plethoric, short-winded, obese man, aged fifty-seven. His blood pressure was systolic 188, diastolic 100. Both legs showed mottled, reddish-brown discoloration from mid-tibia down, with cyanosis of feet in dependent position. There was a healed ulcer site on the left tibia. Dorsalis pedis vessels were absent in both feet.

Pavaex therapy started June 20, 1935, on left leg.

Examination Sept. 12, 1935, after 55 hours treatment: Cyanosis was less on the left side. The chief differences between his present status and before pavaex therapy were in his subjective symptoms. He now can walk well with his left leg—there is only a very occasional claudication. By contrast, in the right leg, which had not been so severely affected, there was pain on the sole of the foot and claudication in the calf muscles on walking a short distance.

There was then a direct experiment: one leg in the same individual as a control, the other leg so much improved that, from having been the worst affected, it was now relatively comfortable.‡

There must be literally thousands of individuals, later in life, moderate or high elevation of blood pressure, probably (but not always) absent dorsalis pedis, who have pains in the feet and legs after walking a short distance and whom this treatment will benefit.

All cases of arteriosclerosis, however, are not benefited.

Case 3.—Thin, pale, sallow man, age 66. He had complained of cramps in the calves on walking for the past two or three years, and for the past one or two years there had been burning pain in both feet, with a numb feeling in all the toes of the left foot. For the past several months, all symptoms were worse in the left foot.

On examination, there was marked rubor of both feet, especially in the dependent position, and worse in the left foot. Both feet felt cool to palpation; no pulsation was felt in either dorsalis pedis or posterior tibial arteries and the radial vessels were sclerotic.

Pavaex therapy was started July 7 on the left foot.

Though there was some amelioration in the pain in the outer side of the foot for a time, the cramps on walking were not benefited.

September 7, after one month of daily treatment, the pain was more intense, if anything. There was rest pain, interfering with sleep. The left foot showed considerable beefy cyanosis when dependent, and white blanching on elevation. There were several areas of small, superficial, dilated vessels on the dorsum of the foot and beneath the external malleolus which had not been there before. The left foot was cold from midcalf down.

The treatment was stopped, and he was advised to rest, completely off his foot, with other conservative measures.

Reid and Hermann (Ann. Surg., Sept., 1935) recently caution against continuing Pavaex therapy in livid cyanotic extremi-

‡Subsequently, the right leg has been treated. It improved similarly, so that he now walks one to two miles without discomfort.

†Since this article was submitted, September, 1935, several careful analyses of the results of pavaex therapy in large numbers of patients have been published. Opinion is still divided about its value. However, more extensive experience with peripheral vascular diseases (over 100 patients treated with pavaex) makes us feel that these case reports are still typical of the benefits which may be derived from this method of treatment.

ties with congested venous return, where there may be no further spasm of the arterioles to dilate and there may be a vasoparalysis instead of vasospasm. Bernheim, in the same journal, reports a similar case who came to amputation following Pavaex therapy. The pressure in these cases may have to be modified. There is danger of even slight pressure rupturing or injuring the intima of the capillaries in certain cases.

Case 4.—A woman, aged thirty-three, had suffered a Pott's fracture of the left leg three years ago. A cast had been worn for six months. She had had an ulcer on the outer side of the leg above the malleolus before the injury, possibly a varicose ulcer, but after removing the cast there was a large ulcer above the external malleolus and a smaller one above the internal malleolus.

She had been treated in the dispensary since Dec., 1934. Unna's boot, support, etc. The ulcer above the internal malleolus had healed but the one on the outer surface was still (July 28, 1935) 2 inches in diameter, with a deep crater, and seemed to be stationary.

Pavaex treatments were started July 29, 1935. After five treatments, improvement was noted—it looked remarkably clean and there were healthy granulations. It had been greyish and dirty looking before.

On September 10, 1935, after thirty daily treatments, the ulcer was about three-fourths inch by three-eighths inch, thin, superficial, scarcely apparent.

January 1, 1936, after about sixty treatments, the

ulcer had healed. It remained entirely healed for two months. Then, following trauma of rubbing with a shoe, it broke open again.

The field for benefit of this mode of therapy in indolent ulcers, delayed healing, old and ununited fractures, various types of osteoporosis and trauma to soft parts, causalgia from nerve end irritation; all conditions which a marked increase in the peripheral circulation will improve, is, as yet, incompletely explored.

These cases, selected from several, represent some of our first impressions only, but we thought them striking enough to record. However, as has been stated by others, knowledge of peripheral circulatory conditions, especially the differences in the clinical course of the different types (Buerger's disease, senile arteriosclerosis, diabetes, etc.); accurate objective analysis of the anamnesis and status both before and after treatment, the knowledge that other conservative procedures (rest, foot hygiene and general exercises, vasodilator drugs, et cetera) are useful at times; all are essential in the use of this apparatus if it perform to its maximum therapeutic efficiency and not be subject to exploitation.

SOME LESIONS OF THE MOUTH DUE TO THE STREPTOCOCCUS AND STAPHYLOCOCCUS

A. R. WOODBURNE, M.D.
GRAND RAPIDS, MICHIGAN

For some years we have had a special interest in lesions of the mouth, and through the coöperation of many dentists, periodontists, oral surgeons, and physicians, have had an opportunity to study a great many of these. These conditions have been covered only very superficially in textbooks and the current literature, and we feel that it behooves us as dermatologists to gain a more complete knowledge of this branch of our work.

We have decided to discuss some lesions due to the staphylococcus and streptococcus because we feel that this group is most usually confused with Vincent's infection and other more chronic lesions of the mouth.

Streptococcic hypertrophic gingivitis presents on examination an acute edema of the gum tissue, redness and hypertrophy. There is no loss of epithelium, no erosion (except, in some, pin point sized eroded pits), or ulceration and the gums are rolled, soft, and tender. The swelling carries the gums up between the incisor teeth and away from the molars. There is a sticky mucous secretion over the gums.

The history of onset is that of an acute infectious disease with malaise, fever up to 101°, sore and very tender gums which makes chewing impossible. The patient complains of a very sticky saliva. The onset frequently follows some dental procedure or is associated with an acute streptococcus sore throat. Children and debilitated individuals are particularly prone to develop this condition, especially children during

teething due to the trauma of eruption of the teeth although it is also seen in healthy vigorous adults. This condition is evidently quite contagious for we have seen more than one case in the same family on several occasions; in one family the father and a daughter, six years old. The infection in the father began four to five days after that in the daughter. In another family two brothers, four and six, developed this infection and after they had had it for a week two cousins visited them for one day and four days later both cousins developed it.

A typical case history follows:

Miss L. H., aged twenty-seven, gave a history of an acute sore mouth and throat, beginning shortly after her teeth had been cleaned by her dentist six weeks ago. Following this, her gums became inflamed, sore, swollen and tender. The soreness extended onto the mucous membrane of the mouth and hard palate. There was some elevation of temperature. Her dentist made a diagnosis of Vincent's angina and gave her some forty treatments, including all the routine medication used in this disease and also one intravenous injection of neoarsphenamine with no great relief. Astringent mouth washes produced some temporary improvement but a few days later there was a marked recurrence and it was at this time that we saw her.

She presented bright red rolled soft gingival margins. The border was edematous and pushed up between and along the labial and lingual surfaces of all the incisor teeth, but occupied only the buccal surfaces of the molars. Between the teeth varying sized hypertrophic masses of gum tissues protruded. The larger masses were raised away from the crowns of the teeth in several spaces. No ulceration, erosion, pustule, or vesicle was seen. There was no membrane or purulent discharge. There was considerable salivation and the patient complained of a sticky secretion in the mouth, which was probably a mucous exudate. Complete physical examination was negative except for: the pulse, which which 84; the temperature 99.2°; the above condition of the mouth and a chronic tonsillitis. The Kahn test was negative. The blood count showed a normal white and differential count with a red count of 3,860,000. The urine was negative.

Direct smears taken from the crest of the gums showed many cocci, a few long rods, and a few large spirochetes and spirilla.

Darkfield examination showed only rare coarse spirochetes.

Culture after seventy-two hours showed rare colonies of *Staphylococcus aureus*, but the plate was largely covered by colonies of *Streptococcus viridans*. Cultures on Sabouraud's medium showed no fungus growth.

Laboratory examination in streptococcic hypertrophic gingivitis is very important. The usual procedures and findings are as follows:

1. Scrapings from the surface examined in 20 per cent sodium hydroxide solution show no fungi.
2. Darkfield examination reveals only rare coarse spirochetes.
3. Methylene blue stains of the exudate show many cocci.

4. Culture on various media shows almost a pure culture of a viridans or hemolytic streptococcus.

On two or three occasions biopsy specimens have been taken and the following findings are typical:

A marked edema and spongiosis of the epidermis with large edematous spaces in the papillary layer are noted. In and about these spaces may be seen many polymorphonuclear and mononuclear leukocytes. The entire submucous layer is edematous with a diffuse scattering of the above type of inflammatory cells. There are no nests of inflammatory cells and no areas of necrosis or degeneration. There are no new formed blood vessels and no stimulation of the fixed tissue cells.

Thus we have the picture of an acute inflammatory process with marked hypertrophy and edema but no hyperplasia or granulomatous change.

The differential diagnosis is not difficult when the above positive findings are kept in mind. The differentiation from the chronic forms due to pregnancy, endocrine changes, mouth breathing, malocclusion, torsion, overhanging crowns, cavities, calculus, and other irritating substances, scurvy, heavy metal poisonings, and leukemia is easily made on the history of an acute onset with the malaise, fever, et cetera, of an acute infection, the presence of the *Streptococcus* in almost pure culture, and the rapid response to gentle antiseptic medication. The more difficult differential diagnosis is the separation of streptococcic hypertrophic gingivitis from an acute Vincent's gingivitis. The hypertrophy, redness, malaise, fever, et cetera, may all be present in the Vincent's infection but there is also usually ulceration, erosion, or some loss of tissue along the gingival margin.

Microscopic examination in the Vincent cases will show the usual numerous large spirochetes and fusiform bacilli, while in streptococcic hypertrophic gingivitis these are extremely rare, and culture will yield the characteristic organism.

Pure cultures from these cases were grown in broth and a series of inoculation experiments were carried out.

Our animals were divided into three groups, each group containing four guinea pigs and two rabbits.

Group A.—In these animals the pure broth culture of *Streptococcus viridans* was gently rubbed on the normal gum tissue about the incisor teeth with a cotton applicator.

Group B.—In these, the gums were gently abraded with a sterile wooden applicator and the broth culture applied.

Group C.—In these, deep excoriation of

the gum tissue was first done and then the culture applied.

The mode of application seemed to make little difference for in all animals inoculated after a period of four days there was a definite congestion and edema of the gum tissue. No marked hypertrophy was noted in any of the animals. This condition lasted for a period of four or five days and then gradually subsided of its own accord. The animals did not appear to be sick at any time.

Culture from the edematous gums always yielded a mixed growth of *Streptococcus viridans* and *Staphylococcus aureus*. The inflammatory reaction never developed to the productions of hypertrophy of any size. However, the process seemed to be the same as that seen in human beings.

In the treatment of streptococcic hypertrophic gingivitis we have found that systemic measures are very important. Thus, rest, forcing of fluids, alkalies, and salicylates are ordered. Local treatment consists in frequent washing with dilute solutions, i.e., 1/5000 KmnO_4 , 1/1000 metaphen solution, dilute salt and soda solutions, etc. Once or twice a day the inflamed areas are cleaned with one-half strength hydrogen peroxide and painted with 1/500 metaphen solution.

Caustic medication was tried but was found to aggravate in each case. Thus the usual drugs used in Vincent's infection, such as chromic acid, arsphenamine, copper sulphate, ultra violet light, et cetera, are contraindicated. Under suitable treatment the patients are usually well in one week to ten days.

Infectious Membranous Stomatitis

Infectious membranous stomatitis is a condition which we have seen rather frequently and which is characterized by small or large, painful, superficially eroded, non-infiltrated patches of the buccal mucous membrane. These are covered by a white yellowish or greyish white, thin, soft membrane which is easily wiped away. The surface beneath the membrane is raw and acutely inflamed, with many fine hemorrhagic dots and vascular tufts. The surrounding mucous membrane is bright red. The areas extend peripherally and in arciform figures.

The membrane examined in 20 per cent sodium hydroxide shows no fungi or yeast. Darkfield examination shows no spirochetes and stained smears show many cocci. Culture on the usual media shows in all cases a growth of both staphylococci and streptococci; almost always *Staphylococcus aureus* and in about equal numbers the *Streptococcus viridans* and the *Streptococcus hemolyticus*.

The differential diagnosis here must include Vincent's infection, syphilis, tuberculosis, aphthæ, and periadenitis, *mucosæ necrotica recurrens*.

The differentiation from a Vincent's infection probably offers the most difficulty, but the Vincent's infection usually begins about the gum margins, which is not characteristic in infectious membranous stomatitis. In Vincent's infection there is usually definite deep destruction of tissue; here there is only an erosion. The Vincent's organisms are not found in darkfield or stained preparations.

In both syphilis and tuberculosis there is a definite infiltration which is lacking here and in syphilis the spirochete may be demonstrated by darkfield examination. The short course and rapid development of these lesions is an aid in differentiation.

Aphthæ and periadenitis *mucosæ necrotica recurrens* are single lesions scattered over the mucous membrane of the tongue, mouth, and pharynx. The lesions appear suddenly with severe burning sensation, do not spread peripherally and come in crops; one group subsiding to be soon followed by another.

In the aphthous lesion the base is that of a ruptured vesicle with a secondary membrane developing later. In periadenitis *mucosæ necrotica recurrens* the primary lesion is deep with a tough firm necrotic membrane. Aphthæ and periadenitis *mucosæ necrotica recurrens* are both trophoneurotic lesions and the organisms found on the surface are the usual secondary invaders of the mouth.

The treatment of infectious membranous stomatitis must be gentle and yet thorough. The surface membrane should be cleaned away by gentle swabbing once a day. Often rinsing with half strength hydrogen peroxide will clean it off sufficiently. The mouth should be washed every two or three

hours with a dilute saline solution and 1/500 metaphen solution painted onto the areas three times a day. In some cases 1/2000 KmnO_4 mouth washes will be helpful. Caustics and irritating drugs are contraindicated.

We have divided this last type of case into three main groups analogous to more widely known lesions seen on the skin and will briefly cite cases illustrating these types.

First, *infectious stomatitis* secondary to injury, burns, dental procedures, and other trauma is illustrated by the following case:

Father C., aged sixty-three, was seen with a group of herpes on the lower lip. These had been picked and the crust removed several times and there was some surrounding inflammatory reaction. Boric acid wet dressings were advised and he was seen in two days.

At this time there was more evidence of picking which the patient admitted. Two days later the patient was seen with many eroded lesions with surrounding inflammatory reaction and yellow thin membrane rapidly extending in polycyclic figures away from the lip on the buccal mucous membrane. The usual laboratory procedures showed *Staphylococcus aureus* and *Streptococcus viridans*, no yeast, fungi, or spirochetes.

Routine treatment was instituted and there was considerable relief. However, the membrane was not thoroughly removed and extension continued in some areas. When more complete treatment was started extension stopped at once and the mouth was completely healed in one week.

A second group seen in children and associated with *impetigo contagiosa*, and in some instances extending from it, is well illustrated by the following case:

Mary B., aged two, was seen with a typical impetigo contagiosa of the chin and lower cheeks. One patch had extended across the vermilion border of the lip and produced polycyclic figures with a thin yellowish membrane on the buccal mucous membrane of the lower lip and extending laterally onto the inner surface of the cheeks. Routine laboratory studies showed *Staphylococcus aureus* and *Streptococcus hemolyticus*, no yeast, fungi, or spirochetes. Treatment as outlined above for the mouth and routine treatment for the impetigo caused both conditions to clear up simultaneously.

This case particularly, and one or two others to a lesser degree, have impressed us with the very close similarity if not identical nature of these two infections. The type of lesion in impetigo and infectious membranous stomatitis is identical with superficial erosion of epithelium, very superficial crust or membrane, spreads peripherally and in polycyclic figures, contagiousness, responds to mild mercurial medication, and refractory nature when strong irritating substances are used. The organisms in both impetigo and infectious membranous stomatitis are the same, that is, either *Staphylococcus aureus* or a *Streptococcus* or both.

The third group of cases, of which we have seen several, strongly resemble *infectious eczematoid dermatitis* as seen on the skin, in that an infectious membranous lesion extends peripherally over the mucous membrane from a peridental abscess.

This type is illustrated by Mr. E. A., aged forty-five, seen with a typical picture of infectious membranous stomatitis involving both the gingival and buccal mucous membrane of the lower lip. There was definite gum retraction about the incisors and a small peridental abscess well under the gum on the root of the right lateral incisor.

The abscess was drained and the surrounding stomatitis treated as above with very rapid healing. In this case the patient had received all the routine medication for Vincent's disease over a period of several weeks with no results. As seen in the mouth the similarity of this condition to infectious eczematoid dermatitis is limited to the characteristics of being secondary to a purulent focus and resistance to treatment until the focus is removed. The appearance of the lesion on the mucous membrane is like an impetigo and not like an infectious eczematoid dermatitis as seen on the skin.

We have felt for some years that most inflammatory lesions of the mouth are called Vincent's disease by far too many dentists and physicians, and wish to take this opportunity to point out some points of differentiation between that condition and these other fairly common infections of the mouth.

CANCER SURVEY OF MICHIGAN*

Made by
FRANK LESLIE RECTOR, M.D.†

Autopsies.—From information gathered in this survey, the conclusion seems warranted that in many Michigan hospitals neither hospital executives nor staffs are actively interested in securing autopsies. In some hospitals lack of a pathologist or internes, or both, may account for the small number of autopsies. The fact that few hospitals in Michigan are outstanding in their percentage of autopsies in comparison to hospitals in other parts of the country should be a matter of some concern to the hospital authorities and staff members, especially in those hospitals accredited for interne training.

It is believed that were concerted efforts made by the physician in charge of the case, the interne and pathologist when available, and hospital authorities, the number of autopsies in many Michigan hospitals could be increased materially. Community opposition to such procedures, where it really exists, could soon be overcome by tactful measures on the part of those most interested in the problem. It would also be helpful if the state and local medical societies threw their influence in favor of this problem, as has been done elsewhere, notably in Lancaster County, Nebraska, in which the city of Lincoln is located. Because of the interest of the medical society, approximately 30 per cent of all deaths in Lancaster County are brought to necropsy. Two instructive articles on methods of obtaining autopsies may be found in the April, 1931, issue of *Hospital Progress*, and in the *Journal A. M. A.*, v. 101, p. 1199, October 14, 1933.

Tumor Registry.—In connection with an improved service for examination of surgical tissues and autopsy material, it would be well to establish one or more tumor registries in Michigan. The Cancer Bureau maintained jointly by the Wayne County Medical Society and the Detroit Department of Health might well serve as the nucleus for such a registry for Detroit hospi-

tals. A tumor registry in the University Hospital, Ann Arbor, contributed to by those hospitals sending tissues for examination would form a valuable collection of material for study. The essentials for such a registry exist in the excellent collection of pathological material organized by the late Dr. A. S. Warthin and continued in the Department of Pathology. A third such registry might be developed in Grand Rapids where there are three excellent laboratories, some of them serving several hospitals in that part of the State.

A tumor registry should contain a stained and mounted section of tissue, the block from which the section was cut, a short description of the tumor, and concise clinical summary of the case. The collection should be available at all times for study by reputable physicians, medical students, and scientists in allied fields.

National registries already established are the Registry for Bone Sarcoma, American College of Surgeons, Chicago, Illinois; Registry for Lymphatic Diseases, Registry of Bladder Tumors, and Registry of Eye Tumors at the Army Medical Museum, Washington, D. C. Local registries have been established in Philadelphia, Washington, D. C., and elsewhere.

Radiation Therapy.—In Michigan the installations of x-ray equipment of 200,000 volts or more capacity have increased materially during the past few years. As noted in Table XXI, 18 hospitals now have such equipment and at the time of this survey other hospitals were considering its installation. In addition deep x-ray equipment is located in private offices of physicians in Grand Rapids, Kalamazoo, Jackson and Detroit.

From the standpoint of population and number of cancer deaths, an additional 6,000 milligrams or more of radium should be available in Michigan.

It would probably be necessary to educate an additional number of physicians in Michigan in the safe use of this form of therapy before the expense of a radium emanation plant would be justified. Those hospitals in which radium was being used apparently

*Continued from May, 1936, issue.

†Field Representative, American Society for the Control of Cancer, New York, N. Y., Clarence Cook Little, Sc.D., Managing Director.

had competent personnel in charge of this work. It is believed that rental of radium from commercial houses is confined to a relatively few physicians in Michigan, and in the majority of cases physicians refer cancer patients to hospitals where radium and trained personnel are available rather than attempt this treatment themselves with rented radium.

For purposes of furnishing the instruction referred to above, and to provide at least one complete center for diagnosis and treatment of malignant disease in the State, an emanation plant might well be added to the radiation therapy facilities at the University Hospital, Ann Arbor. Under proper safeguards the surplus output of radon could be made available to other hospitals and physicians as rapidly as they became competent to use it.

The facilities of the radiological department of the University Hospital are now taxed to their capacity and additional equipment is needed. Another deep therapy machine and an emanation plant would provide for the needs of the department for some time.

As Receiving Hospital, Detroit, is the principal teaching hospital for Wayne University Medical School, it would seem desirable for acceptable undergraduate teaching to have available in that institution a deep therapy x-ray equipment and a sufficient quantity of radium to care for cancer patients found there. While students in this school obtain a part of their instruction at Eloise, where considerable radium is used, a supply of radium would make it possible to retain cancer patients at Receiving Hospital for extended study by the student body.

Use of radium and deep therapy in Michigan should be restricted to physicians competent in their application. National, state, and local medical societies are encouraging the indiscriminate use of radium by carrying advertisements of commercial renting agencies in their official publications. Resolutions passed by the four national radiological societies and articles condemning the rental of radium by untrained physicians have appeared in issues of national, state, and local medical publications carrying advertisements of radium rental concerns. Such policies on the part of journals are open to just criticism. On the other hand, no criticism can be made of physicians with adequate training and compe-

tence in this field who prefer renting radium to owning it. However, the use of radium by physicians without adequate training and who have opportunities to use it only at infrequent intervals cannot be commended.

The observation might be made that if locally owned radium is rented, it will be much easier to obtain necessary consultation than is the case when it is obtained from distant sources where the only consultation possible is by mail or wire and of dubious value.

Patients able to do so should pay reasonable fees for radium treatment. On the other hand, when it is available, no patient should be denied radium treatment because of inability to pay. Physicians and institutions owning radium might well remember that there is no diminution in its therapeutic value by use, and if indigent patients require treatment when the radium is not in use on paying patients, no loss is sustained in using it on such patients.

There is a widespread feeling in the public mind that irradiation therapy is so costly that it is available only to the wealthy. Because of this feeling, many people delay or neglect treatment, with disastrous results. Without wishing to indicate in any manner what fees should be charged for irradiation therapy, those physicians and institutions controlling such means should keep in mind the above facts in fixing their charges. In the long run, it would seem to be more economical and profitable to keep radium in fairly constant use at a lower charge than to have it used infrequently at higher rates, to say nothing of the greater service rendered by so doing.

Organized Tumor Service.—Eight special tumor services, organized in whole or in part according to recommendations of the American College of Surgeons, were found during this survey. Similar services were under discussion in other hospitals in Ann Arbor, Detroit, Flint, Grand Rapids and Saginaw. In each of these cities facilities and personnel already exist for an organized service, and it remains only for the physicians and institutions concerned to make a practical organization possible.

The tumor service in the University Hospital, Ann Arbor, is making a distinct contribution to undergraduate and graduate teaching. It is fully organized as an approved service by the American College of Surgeons. As this service is available pri-

marily for patients from over the State rather than from the Ann Arbor area, a similar service might well be developed in St. Joseph's Mercy Hospital, Ann Arbor, where there are facilities and personnel to care for all cases resident in that vicinity.

In some of the Detroit hospitals, existing efforts along this line might well be extended to provide a more complete service for their patients. The work in Harper Hospital, confined to a monthly meeting for patients in the out-patient department, is but a feeble effort toward the provision of an adequate organized tumor service for both in- and out-patients of this hospital. With the unusually adequate facilities for diagnosis and treatment of cancer in this hospital, it would seem desirable to develop a program of service to include both in- and out-patients and to be so organized that all clinical departments would be actively represented in it.

A similar service might well be developed at Providence Hospital, Detroit, where the matter has been under consideration for some time. Recent additions to the therapeutic equipment in this institution should act as a favorable influence in developing their program.

The organized services now functioning in Grace and Woman's hospitals, Detroit, might well be extended to serve in- as well as out-patients.

The special tumor service in Henry Ford Hospital, Detroit, is furnishing good educational advantages to those attending its sessions. It would seem desirable to obtain a larger and more representative attendance of the staff, particularly of the internes, because there is no out-patient department where they have an opportunity to study cancer patients more at length. The efforts made to obtain accurate follow-up records on cancer patients in this hospital are most commendable and results so far obtained have added data of value to existing knowledge in this field.

The organized tumor service in St. Mary's Hospital, Detroit, was still in the formative stage at the time of this survey. Regular meetings were not being held, although histories of cancer patients were being recorded on uniform blanks for further study. This committee might well complete its organization by meeting regularly to consider all cancer patients admitted to the hospital.

Lack of equipment for radiation therapy at Receiving Hospital, Detroit, prevents development of its tumor service to a point where approval by the American College of Surgeons can be expected. However, good use is being made of available facilities and material and the lack supplied in a measure by the facilities at Eloise.

The facilities of the Dr. W. J. Seymour Hospital, Eloise, are being enlarged by addition of another deep therapy equipment, which was on order at the time of this survey, and by the procurement of more radium as funds permit. Two hundred beds have been set aside for cancer patients. Students in Wayne University Medical School are required to spend a definite period in the tumor service work during their senior year. The tumor service here is one of two such services in Michigan hospitals most nearly meeting the requirements of the American College of Surgeons, the University Hospital, Ann Arbor, being the other.

There is in Detroit an institution known as Mercy Hall, organized about five years ago to care for terminal cancer cases. Its development represents the interest and enthusiasm of one woman who has worked persistently to provide the care needed for this type of patient. For some time the work of this institution was devoted to the care of a few terminal cases. More recently, however, larger quarters were secured and additional functions undertaken until at the time of this survey a dispensary service had been added for ambulatory patients and a fully equipped operating room had been installed to care for surgical cases. Plans have been made to further enlarge this institution to a capacity of 50 beds, and to extend its work to include care of all stages of malignant disease. Should these plans materialize, this institution will represent the first hospital in Michigan devoted exclusively to diagnosis and treatment of cancer patients.

Each of the three hospitals in Grand Rapids has adequate facilities and personnel for the organization of a special tumor service. In the past, efforts made to develop an improved service for cancer patients in each of these institutions have not been of a permanent character. As this city is the medical center for a large area, it would seem desirable that a special tumor service in one or more of the hospitals, or as a combined

undertaking by all three hospitals and the local medical society, be established.

The number of cancer patients and the availability of facilities for diagnosis and treatment in Hurley Hospital, Flint, indicates the desirability of organization of a special tumor service in this institution. The amount of radium locally available is insufficient for such a service and should be augmented by at least 150 milligrams. This service should be open to the other hospitals in Flint whose bed capacity at the time of the survey was insufficient to warrant a special tumor organization in them.

The three hospitals in Saginaw might well undertake the development of a community tumor organization, the details to be worked out in the light of local needs. With one pathologist and one radiologist serving all hospitals, the problem of organization of personnel is greatly simplified in this community.

Battle Creek Sanitarium, Battle Creek, has adequate facilities for a special tumor service. While the work of this institution is such that fewer cancer patients are seen than in a similar number of patients in the average general hospital, the administrative organization lends itself very well to the functions of a special tumor service.

The Leila Y. Post Montgomery Hospital, Battle Creek, has recently installed a deep therapy equipment and was endeavoring to obtain a supply of radium in order to qualify as an approved tumor service. As there is both a full-time pathologist and radiologist in this hospital, the organization of a special tumor service should be considered seriously as soon as the physical equipment is available.

Hackley Hospital, Muskegon, has provided deep therapy and radium for the treatment of cancer patients. With a capable radiologist and a full-time pathologist on the staff of this institution, and as the staffs of both Muskegon hospitals are practically composed of the same physicians, it would seem desirable to organize a special tumor service on a community basis in which the two hospitals and the medical profession would coöperate. Duplication of equipment in that city would hardly seem justified at the present time.

In Bay City the addition of radium to existing facilities would complete the requirements for a special tumor service in Mercy Hospital. The services of a pathologist and

a radiologist are available in that hospital. Willingness of the staff to perfect the organization remains to be expressed.

No deep therapy equipment was found in Lansing, although 150 milligrams of radium are privately owned in that city. The number of cancer patients seen in the hospitals of that city suggests the desirability of increasing the therapeutic resources to meet the minimum requirements and organizing a tumor service.

In those cities without complete equipment for cancer therapy, but where capable pathologists and a diagnostic roentgenological equipment are available, diagnostic tumor services might well be organized. Treatment, as far as local resources permit, could be carried out with proper reference of patients needing therapy beyond the resources of the community to supply.

It is unfortunate that there is neither deep therapy equipment nor radium available in the upper peninsula. The absence of these facilities and of a pathologist creates a situation in that part of the State that should command the serious attention of hospitals and medical groups. While many patients needing irradiation are able to travel to other cities where this form of therapy is available, there are others who would profit from such treatment if it were available in or near their own communities. The nearest radiation facilities to the upper peninsula are found in Duluth, Minnesota, Green Bay, Wisconsin, and Muskegon, Grand Rapids, Saginaw, Bay City, and Ann Arbor, Michigan. This necessitates travel of from 250 to more than 1,500 miles for each round trip visit.

In view of the conditions enumerated above, it would seem desirable that serious consideration be given to the development of facilities for the examination of tumor tissue and for the treatment of patients by irradiation therapy in one or more cities of the upper peninsula. Without in any way suggesting a further encroachment of the State on the private practice of medicine, but to offer a practical solution of a pressing problem, the suggestion is made that, in the absence of private laboratory service in the upper peninsula and the improbability that such a service will be established in the near future, such service might well be provided by the State Department of Health in its branch laboratory at Houghton. With a minimum of expense this service could be

provided without attempting to set a precedent for similar services in other communities where adequate facilities are available.

It is doubtful if at this time it would be advisable to attempt organization of special tumor services elsewhere in Michigan. This statement is made, not in criticism of physicians or hospitals in other communities, but to point out that practical difficulties of providing adequate diagnostic and treatment facilities preclude the advisability of attempting special organizations for care of tumor patients in cities other than those mentioned. Proximity of certain cities to larger centers where adequate facilities already exist should lessen the desire of hospital authorities to install expensive equipment for treatment of cancer patients. So far as the resources of any community permit, the fullest possible service should be rendered to cancer patients, and when conditions are found beyond the scope of local resources, patients should be referred elsewhere for treatment.

Diagnostic and treatment methods have been developed to a point where hospitals and physicians unable to supply adequate service should consider their obligation to the patient above their desire to continue his care. In discussing this question, Dr. James F. Kelly,* Professor of Radiology, Creighton University Medical School, Omaha, Nebraska, has said:

"No doctor admits he is dishonest; no institution admits its policy is dishonest. If the doctors and the institutions having the care of the sick as their responsibility will seriously consider the cancer problem as it exists today, it will be but a short time until every community will have at least one institution where special effort is being made to give more than the usual indifferent treatment to the cancer case.

"The changed attitude of the medical profession is in a great part due to the leadership of a few outstanding individuals, institutions, and organizations in their fight against cancer. The latter proved by many instances that cancer is a curable disease and the doctor who is so far behind the times as to declare that all cancer patients are as good as dead and states that one treatment is as effective as another is certainly hopelessly incompetent. The institution which approves of such a policy by failing to make some effort to provide for adequate care of the cancer patient is, to say the least, poorly managed."

Organization of a special tumor service should be based on two considerations: one, the better service such a group can render cancer patients through combined diagnosis

and opinion as to treatment; two, the opportunity offered for education of medical and related groups. Given proper facilities, the successful initiation of a program depends on the active interest of a few staff members. This must be a compelling interest that will not stop to count the cost in time or energy necessary to advance the plan. The pathologist, radiologist, surgeon, and internist each must be willing to contribute generously to the undertaking. Just which member of the group becomes the director depends on the local situation. The surgeon doubtless will be chosen in many cases. The pathologist, because of removal from actual clinical treatment, has much to recommend him. No matter who is chosen, selection should be on the basis of active interest, executive talent and ability to win co-operation of other members of the special group and hospital staff.

The question of treatment of pay patients always arises when an organized tumor service is discussed. Obviously for the good of the patient the same type of organization should be available for pay patients as serves the indigent group. It has been suggested that a physician should refer a paying cancer patient to the tumor service for diagnosis and opinion regarding treatment, treatment to be carried out as he may choose. This plan gives both patient and physician the advantage of group opinion on the case. Ways can be found with fairness to all concerned to care for pay patients in a special tumor service, but development of a plan rests with the local profession and hospital.

The following report* on five years' experience with an organized tumor service in Hollywood Hospital, Hollywood, California, which has no out-patient department and no free beds, shows the number of private patients referred by their physicians to the tumor service for consultation and diagnosis, and indicates that a coöperative program can be developed for private patients when there is full coöperation of all concerned.

Year	New cases	Patient visits
1929	108	157
1930	110	193
1931	127	236
1932	162	401
1933	225	530
Total	732	1,517

*The Rôle of the General Hospital and its Staff in the Care of the Cancer Patient, with Special Reference to the Formation of Tumor Clinics. Hospital Progress, October, 1934.

*Bulletin, American Society for the Control of Cancer, v. 16, No. 5, p. 8, May, 1934.

"The number of patients referred by doctors either on the Hollywood Hospital staff or elsewhere, was 673. Twelve physicians have referred from 35 to 10 cases apiece to the Malignancy Committee. One hundred and ninety-six physicians had their patients consult the Committee. Five-year follow-up group for cancer of the cervix totaled 126 cases and four-year follow-up group for breast cases totaled 122 cases."

From observation and conference with many physicians, it is believed that comparatively few private patients will object to coming before a special tumor group for consultation on diagnosis and the form of therapy to be employed. Reports from some hospitals are to the effect that their private patients welcome the opportunity of a consultation and ask for it if it is not accorded them on admission. Objections to such procedures are believed to come more often from the attending physician, who thus deprives his patient of the benefits of a consultation and himself of the added knowledge such an experience would bring.

It is realized that not every attempt at a special tumor service organization will succeed. Lack of support by local physicians, inability of the special group to render an improved service, superior facilities and organization in other local hospitals, or in adjoining communities, may cause the abandonment of such a service. The possibilities of failure for the reasons mentioned, or for others, should not deter a hospital group from attempting such work as the development of an added interest in the cancer control problem on the community's part, and the stimulation of the interest of local physicians in an improved diagnostic and therapeutic service will be adequate compensation for the efforts involved.

As conditions vary in different communities, it is impossible to standardize procedures for the conduct of special tumor services. A suggested procedure that may be of value is found in the May, 1935, issue of the *Bulletin of the American Society for the Control of Cancer*.

Follow-up Records.—The development of facilities for obtaining information about the health of cancer patients after they have been under treatment is an important part of the special tumor service. Contact should be maintained with all cancer patients for at least five years after their first treatment, and preferably for life. This is not so difficult in smaller communities because the condition of patients can be ascertained readily from friends or relatives.

A follow-up service requires coöperation of the clinical, record, and social service departments of hospitals, and utilization of private health and welfare agencies. Of prime importance in such an undertaking are adequate and complete records of the hospital experience of the patient. That this is of serious importance, the experience of one hospital visited in this survey indicates. This institution of nearly 400 beds reported 19 hospital cancer deaths and 34 cancer autopsies during 1933. Investigation showed that, from the pathologist's records, the number of autopsies was correct, but on many of the clinical records the final diagnosis had not been entered, and the record had been filed without this essential information. The accuracy of records of other patients in this institution and similar institutions is open to doubt.

The system of tabulating information from hospital records now in use at the University Hospital, Ann Arbor, provides a most complete source of information about any phase of a patient's hospital experience. This system might well be followed by the other large Michigan hospitals so far as possible.

The following outline indicates some major sources of contact in following cancer patients:

OUTLINE OF PLAN OF FOLLOW-UP ON TUMOR PATIENTS

A. Coöperative Groups

1. Hospital administrative groups
 - a. Superintendent
 - b. Social service worker
 - c. Record clerk
 - d. Chaplain
 - e. Nurses
2. Hospital staff
 - a. Cancer committee—if any
 - b. Physician in charge
 - c. Radiologist
 - d. Pathologist
 - e. Internes
3. Community groups
 - a. Department of Health
 - A. Public health nurses
 - B. Bureau of Vital Statistics
 - b. Visiting nurses
 - c. Private health organizations
 - d. Charitable and welfare organizations
 - e. Life insurance companies

B. Records

Records to be entered on forms comparable to all hospitals. The forms of the American College of Surgeons are recommended, not that they are necessarily the best, but offer a form from which comparable data may be obtained. Information as to deaths may often be obtained from the Division of Vital Statistics of the local or state health department.

C. Schedule

Follow-up to be maintained on approximately the following schedule:

Monthly for the first six months

Bi-monthly for six months

Every three months for the second year

Semi-annually for three years.

Annually thereafter, preferably for life

Information to be obtained by personal contact, by written inquiry, and through coöperating groups noted above. A personal letter is better than a printed form or post-card inquiry.

Provision of adequate diagnostic and treatment facilities is beyond reach of the average general hospital from current resources. Assistance in meeting this need can be expected from but two sources—private philanthropy or public taxation. Private funds usually will be larger in amount, of a more permanent nature, and with fewer political alliances to hinder their administration. After the superiority of an organized tumor service over existing uncoordinated methods of handling these cases has been established, it then may be advisable to seek public support of this work. A period of demonstration is desirable, however, in order to develop local resources and interest before recourse to public funds is considered. Support of cancer control by taxation places this disease in the public health group and distributes the burden among the entire population, which by reason of this participation may develop a greater interest in the subject than if its support is left to a few community-minded persons.

The best method of meeting the cancer problem in all communities has not yet been developed. The medical profession should be given a reasonable time to show what it can do. If it fails, and recourse to State aid is found necessary, approach to such a course should be through medical channels. The medical profession should recognize, however, that the public is daily becoming more interested in the cancer problem. In general, this interest has not yet become manifest through organized channels, but it is only a question of time until such organized interest will be evident. Unless the profession takes full advantage of present accepted methods for diagnosis and treatment of this disease, it will be faced with the necessity of combating efforts of lay groups to place cancer with those diseases now controlled by the State.

If information now available as to prevention and control of cancer were utilized

fully by the medical profession and the public, a reduction of from 30 to 50 per cent in mortality from this disease could be effected within a few years. The significance of this fact should stimulate all agencies, professional and lay, public and private, to a concerted attack upon the problem. The control of cancer is in the hands of the medical profession and hospitals, where it properly belongs. The interested public should confine its efforts to strengthening the resources of these two groups and to lay educational work so that cancer patients will come for examination at the earliest possible moment while there is the greatest opportunity for permanent relief.

Physicians should appreciate that cancer is not a "one-man" disease, but requires the best medical thought and skill for its diagnosis and treatment. The profession also should be stimulated by the thought that cancer is one of the few diseases in which medical skill alone can bring about a cure. Neglected cancer always kills, but the physician, by removal or destruction of all malignant tissue, places his patient out of danger of death from this disease.

Physicians should not temporize with cancer or suspected cancer. Expectant treatment, *viz.*, waiting to see what develops in the next few weeks or months, has no place in accepted cancer therapy. The answer should be obtained when the case is first seen. For practically all forms of malignancy, the physician has a choice of recognized methods of diagnosis and treatment. If such facilities are not available locally, the patient should be referred to an institution where the answer can be given. Numerous instances could be cited where delay resulted fatally when there was a strong probability of recovery by proper treatment when medical opinion was first consulted, and also other instances where a bold approach revealed a malignancy in a tumor to all appearances benign when first seen. Only by a vigorous attack by physicians skilled in handling this disease can progress be made in reducing its incidence and mortality.

Cancer is probably the greatest challenge before the medical world. Its wide distribution and increasing mortality demand the best thought of all scientists, and only by intensive and coöperative efforts can the problem be solved.

The Michigan State Medical Society can

make an important contribution to cancer control by better coördination of educational and therapeutic resources of the State for benefit alike of the physician and public. While excellent work in postgraduate education has been carried on for several years as a coöperative undertaking by the State Medical Society and the University of Michigan, it is believed that the social and economic importance of cancer warrants an added emphasis on the subject in this postgraduate work. Such a program might well be projected over a 5-year period, during which time at least one cancer program annually would be given before each local medical society. One type of cancer, as breast, uterus, skin, etc., might be featured for a year's work, so at the end of five years the major forms of malignant disease would have been covered in a comprehensive postgraduate course. A cancer symposium in keeping with the special subject being presented to local societies and a suitable exhibit would be desirable features at each annual state meeting.

For those physicians desiring further opportunities in cancer education, special courses might be offered by the two medical schools. There is such a wealth of information and material available at the University and in Detroit that a comprehensive postgraduate course in all forms of malignant disease could be developed with a minimum of effort.

The lay education program of the Cancer Committee of the Michigan State Medical Society should be extended as rapidly as practicable to all lay groups. The program for high schools and colleges is most commendable, offering authentic information on cancer to an intelligent portion of the population not yet having had personal experience with the problem. This is a most practical type of work in the prevention of cancer and the needs of the committee having the matter in charge should be met to the fullest possible extent.

The articles prepared by the Cancer Committee of the State Medical Society for publication in the newspapers of the state is most commendable and should serve as an auspicious beginning for a permanent service. The health and hygiene column maintained in certain Michigan papers by the State Joint Committee on Public Health Education might well include more articles on cancer.

Courses offered in the Division of Hygiene and Public Health of the University of Michigan should include instruction in recognition and prevention of cancer and should be fully coördinated with the work of all other departments of the University in this field.

The interest of women's clubs and similar organizations in the cancer educational program should be fostered and directed by the medical profession in Michigan. Because of the active interest of the General Federation of Women's Clubs, state federations and local clubs daily are becoming more interested in this problem. This interest culminated at the Triennial Convention held in Detroit in June, 1935, in passing the following resolution:

WHEREAS, Under the guidance of the Advisory Board on Public Health and Child Welfare, the General Federation of Women's Clubs has been carrying on intensive educational work for cancer control and realizes the necessity for increased effective measures for cancer control in all localities, therefore be it

RESOLVED, That the General Federation of Women's Clubs in convention assembled, June 10, 1935, urges the State Federations to take up with state and local health authorities the establishment of more effective cancer control.

An exhibit on cancer at this same meeting did much to focus the attention of state and local clubs on the educational possibilities in this field and their opportunities and responsibilities in the work.

Radio broadcasting offers another medium of lay education utilized by some state medical organizations. The Minnesota State Medical Association has contributed a weekly broadcast for several years, each fourth broadcast treating of some cancer subject.

The broadcasting program of the Wayne County Medical Society has been giving but little emphasis to the subject of cancer. It is believed that the time is now ripe for broadcasting information about this disease at more frequent intervals than in the past. It is reported that authentic information on health and medical matters is increasingly welcomed by the public, and medical organizations who have or can gain access to broadcasting facilities should take full advantage of the opportunity to disseminate information on cancer and other health problems.

The Michigan State Medical Society should stimulate discussion and appraisal of diagnostic and treatment methods looking

toward greater uniformity of procedure. It should sponsor well balanced programs of treatment in those hospitals offering acceptable facilities for the care of cancer patients. It should encourage closer coöperation among surgeons, internists, pathologists, radiologists, and family physicians in handling these patients. It should take the initiative in securing more autopsies and examination of all tissues removed in all hospitals of the State. It should encourage the appointment of cancer committees in each local medical society and in those hospitals offering organized facilities for the care of cancer patients. It should recommend to medical, dental, and nurse examining boards the inclusion of questions on cancer in their respective examinations for licensure.

Development of the above program should include coöperation of dentists, as they have opportunity to discover many malignant conditions in and around the mouth, and of nurses, who also have a responsibility in the cancer educational program. Public health nurses in particular have many opportunities of discovering cancer in an early and hopeful stage among the patients with whom they come in contact.

In the past cancer has been given little attention by the State Department of Health in Michigan. It has published some analyses of cancer deaths from time to time, but has taken no active part in a cancer educational program. Recently, however, the Department has undertaken the study of a specific problem, the incidence of cancer morbidity in rural areas. At the last annual meeting of the Michigan Public Health Association cancer was given a prominent place on the program. The State Commissioner of Health is now a member of the Cancer Committee of the State Medical Society and is contributing to the development of a State-wide cancer control program.

In view of the importance of cancer as a disabling disease creating many problems that require extensive public education for their solution, and as a major cause of death in Michigan, the State Department of Health might well create a Division of Cancer Control within its organization whose activities would be educational and research rather than clinical in character, include cancer among the subjects to be emphasized by its Division of Health Education, and continue to coöperate as fully as its resources permit with other organizations constructively interested in the problem.

Through the organization of a State-wide committee, the Michigan State Chairman of the American Society for the Control of Cancer can assist the State Medical Society in preparation of material for postgraduate work and local medical society programs and in providing competent speakers and literature for lay meetings; render assistance to organized tumor services by directing the public to them; coöperate in the follow-up of cancer patients; and by similar undertakings. The activities of this committee should be financed largely from local sources.

It would be a practical and logical procedure for the Michigan State Medical Society, representing both the educational and clinical resources of the State, the State Department of Health, and the State Committee of the American Society for the Control of Cancer to coöperate in a State-wide educational program, details of which will be discussed later. This plan would provide for Michigan an improved service for all cancer patients within the State. It would educate physicians in acceptable clinical procedures and would provide the public with authentic information about the disease.

(To be concluded in next issue)

President's Page


THE RECRUITING SEASON

JUNE is the month of brides and of medical and other graduates. It is a month also of commencement addresses with volumes of advice to the latest diplomates in medicine. All lofty idealism will do little harm and perhaps a great deal of good.

Medicine today, however, is "not what it used to be" when many of the older members of the profession were young. In former days when one graduated from college and finished his internship, he chose a location and at once began the practice of his profession. At the present time, this is not such an easy matter. The average yearly number of medical graduates from 1931 to 1935 was 5,417. The average number of deaths of physicians yearly for the same period was 3,960. From this, it is seen that the number of new graduates each year exceeds the number of deaths of physicians by 1,457. This means that the point of saturation for physicians in the United States, if not already reached, is fast approaching.

In spite of this, medicine continues to be the most popular of the learned professions. According to statistics compiled by the Association of American Medical Colleges, in 1935, 12,740 persons made 34,427 applications for admission to a medical school and 7,231 were accepted, but only 6,200 matriculated. Another significant thing is that only 11 per cent of all students entering the medical school in the fall of 1935 had less than three years of college work; 52 per cent had entered upon the study of medicine with either a B.A. or B.S. degree. In spite of this, 25 per cent of those who enter a medical college with this high preliminary training fail to graduate, and, of those who do graduate, ten years later another 25 per cent has dropped out of medicine and its allied fields.

The young man entering medicine today is better prepared than ever before. To attain his education, however, he has had to spend over seven cloistered years, during which time he had been pretty much out of touch with the rapidly changing times. His success, however, will depend to a large degree on his ability to adjust himself socially. This will require a great deal of courage and perseverance, but it will not be an impossibility for those who have the urge to survive. The medical profession extends the hand of welcome and at the same time enjoins thoughtful study of the social and economic conditions in which our common lot is cast. The ideals of youth should have a salutary influence on the experience of us older members of the profession.



President of the Michigan
State Medical Society

THE JOURNAL

OF THE

Michigan State Medical Society

PUBLICATION COMMITTEE

A. S. BRUNK, M.D., Chairman.....Detroit
 HOWARD H. CUMMINGS, M.D.....Ann Arbor
 J. EARL MCINTYRE, M.D.....Lansing

Editor

J. H. DEMPSTER, M.A., M.D.
 5761 Stanton Avenue, Detroit, Michigan

Medical Secretary

C. T. EKELUND, M.D.
 35 W. Huron Street, Pontiac, Michigan

Business Manager

Wm. J. BURNS, LL.B.
 2642 University Avenue, St. Paul, Minnesota
 or
 2020 Olds Tower, Lansing, Michigan

JUNE, 1936

*"Every man owes some of his time to the up-
 building of the profession to which he belongs."*

—THEODORE ROOSEVELT.

EDITORIAL

THE BASIC SCIENCES

THE better a student is prepared in the way of education before he enters upon the study of any profession, the more he will get out of his professional courses. This is axiomatic. The trend for over half a century in medicine, law and other professional disciplines, is to exact certain preliminary educational qualifications from prospective candidates for those professions. Everything is to be said in favor of this trend and nothing against it. The body of knowledge (we refer particularly to the healing arts and sciences) has become so extensive that it is impossible for persons without proper preliminary training to make any headway in professional studies at all.

Within recent years, that is, since 1925, certain boards have been legalized requiring all applicants for admission to callings concerned with healing to satisfy certain demands in the way of a general knowledge

and acquaintance with the human body in health and disease. This knowledge is embodied in such subjects as anatomy, bacteriology, chemistry, physiology, pathology and hygiene. It is not unreasonable that anyone, who assays to treat the ills that human flesh (or human mind) is heir to, should know the established facts of the human body. He is free then to pursue studies in any of the various schools of healing he may choose. These requirements have been met by the regular school of medicine and by dentistry. A knowledge of these subjects also should make a more efficient osteopath or chiropractor. It has been reported that in some of the states in which basic science boards exist they have been supported by osteopaths.

There is a great need for such a law in Michigan. Ten states,* including the district of Columbia, already have their basic science boards. Probably others will follow before this state has an opportunity to consider it.

The personnel of the basic science board is all-important. In those states in which such examining boards function, the members must be chosen by the governor from among actual teachers of the various subjects in schools, approved by the North Central Association of Colleges (in the case of states whose colleges and universities are under their jurisdiction). They must be teachers and not actual practitioners of any system of treating the sick. Since the basic sciences are all non-clinical subjects this arrangement is fair to all applicants. Candidates for the study of dentistry are required to pursue and pass the examination in the basic sciences. Christian Scientists are exempt, as Christian Science is a religion rather than a therapeutic cult.

The idea is so much in line with progress that it should meet no opposition if properly understood. In the meantime it is our purpose to present the merits of uniformity in the preliminary training of those who aspire to practice the art and science of healing.

*The states which have basic science boards with the dates of adoption are Wisconsin (1925), Connecticut (1925), Minnesota (1927), Nebraska (1927), Washington (1927), Arkansas (1929), Arizona (1933), Oregon (1933), Iowa (1935), District of Columbia (1929).

APPENDICITIS

RECOGNITION and treatment of the diseased vermiform appendix is largely the work of American medicine. Its recognition as a pathological entity is accredited to Dr. Reginald Fitz, at the time professor of pathology and internal medicine of Harvard University Medical School. Dr. Fitz was the first (1886) to present a complete description of the condition and to give it the name by which it has since been known—*appendicitis*. Before 1886, such cases were recognized as peritonitis or by the vague inclusive expression—inflammation of the bowels. In 1889, Dr. Charles McBurney published a paper advocating early operation before the inflamed mass or abscess could form. Following McBurney's paper, surgeons all over the world began to operate early on such cases. McBurney's paper ushered in a new epoch in the treatment of inflammatory conditions in the lower right quadrant of the abdomen. Before this time, the treatment was medical and expectant, surgery being used only when abscess developed. Needless to say, the mortality was very high. It took nearly a decade to convince the medical profession that the safest treatment of appendicitis was early operation before the inflammatory process should extend to the surrounding structures.

The so-called "medical management" of appendicitis is often in order but it should be recognized as a temporary expedient only, and limited to certain stages of the process of the disease, with the view to operating at the opportune time. Bevan* declares appendicitis to be a local disease in the same sense that a boil on the back of the neck is local. It is made possible when we have the combination of the germ, the local point of irritation, and lowered resistance on the part of the patient. Starting locally, then, if discovered early, operation is a permanent cure in 99 per cent of the cases.

With a careful history, acute appendicitis may be readily diagnosed. Chronic appendicitis, which produces signs upon which the roentgenologist depends—among which are irregularity or "beading" of the lumen,

spasticity of the colon, inability of the appendix to empty with the emptying of the cecum, fixation by adhesions—is due to acute attacks of great or less severity, some of which may not be sufficient to incapacitate the patient. This is the only chronic appendicitis recognized by the pathologist.

It is the opinion of Bevan that more lives are being saved and more persons cured of appendicitis now than ever before, even though through greater care and skill in diagnosis fewer operations might result. Deaths, when they occur, are for the most part due to delay or to incompetency on the part of the operator. The watchword, therefore, should be early apprehensions and early operation by skilled surgeons.

LIFE EXPECTANCY

THE mean expectancy of life for man at birth is 59.3 years and for woman, 62.8. From an estimate made from the study of the inscriptions on 2,022 sepulchres in ancient Greece the average age expectancy was 29.4, about half during the golden age of Pericles what it is today; however, today the man of fifty years can derive little comfort from this circumstance, since the gain all concerns infancy and childhood. Dr. Alexis Carrel in his interesting book* states that a man of forty-five has no more chance of dying at the age of eighty years now than in the last century. He goes on to score the failure of hygiene and medicine. In spite of improvements in heating, ventilation, dietary, hygiene, periodic medical examinations and what not, not even one day has been added to the span of human life. He notes a marked change in the appearance of men and women due to hygiene, athletics, beauty parlors, restrictions in diet, in that everyone seems more alert than in former times. Women are still young at fifty. Modern progress, however, has brought in its train counterfeit money as well as gold. "When their visages, lifted and smoothed by beauty surgeons, become flabby, when massage no longer prevails against invading fat, those women whose appearance has been girlish for so many years look older than their grandmothers at the same age." And "pseudo-young men

*Bevan, Arthur Dean: Present status of the problem of appendicitis. Surgical Clinics of North America. W. B. Saunders Co., February. 1936.

*Carrel, Alexis: Man, the Unknown. Harper and Brothers.

who play tennis and dance as at twenty years, who discard their old wife and marry a young one are liable to softening of the brain and to diseases of the heart and kidneys." The author hazards it that premature wearing out of modern mentality is probably due to worries, lack of economic security, overwork, absence of discipline, and excesses of all sorts. Carrel advises aging men neither to stop working nor to retire. Leisure is more dangerous for an old man than for the young. This sounds rather strange at a time when the Townsendites are advocating retirement at sixty-five. Carrell distinguishes "inward time" from physical time. Physical time is measured by the clock. Inward time is expressed in the normal changes which take place in the human organism during lifetime.

"One perceives, more or less clearly, the changes in the value of physical time, which occur in the course of one's life. The days of our childhood seemed very slow, and those of our maturity are disconcertingly rapid. Possibly we experience this feeling because we unconsciously place physical time in the frame of our duration. And, naturally, physical time seems to vary inversely to it. The rhythm of our duration slows down progressively. Physical time glides along at a uniform rate. It is like a large river flowing through a plain. At the dawn of his life, man briskly runs along the bank. And he goes faster than the stream. Toward midday, his pace slackens. The waters now glide as speedily as he walks. When night falls, man is tired. The stream accelerates the swiftness of its flow. Man drops far behind. Then he stops, and lies down forever. And the river inexorably continues on its course. In fact, the river never accelerates its flow."

Longfellow has expressed this thought:

"The meadow-brook, that seemeth to stand still,
Quickens its current as it nears the mill;
And so the stream of Time that lingereth
In level places, and so dull appears,
Runs with a swifter current as it nears
The gloomy mills of Death."

There are two kinds of preventive medicine, so-called. One has proved its efficiency in conquering the infectious diseases of childhood, thus enabling many more to attain the age of maturity. There is ample opportunity for the other brand of preventive medicine to prove itself worthy. Here is a field for the biologist, the chemist and the pathologist to work in harmony, and in the application of the results of their research to actual conditions incident to aging man there is a large field for the physician. Mere length in years is not so important as a virile mental life.

DR. CARL FREDERICK MOLL

THE passing of Dr. Carl Frederick Moll of Flint has removed from Michigan medicine one of its most loved and respected



CARL FREDERICK MOLL
1872-1936

members. Dr. Moll had practiced in Michigan since his graduation thirty-seven years ago: first in the upper peninsula, where his work was largely in a mining community and for the past nineteen years in Flint. Few physicians had a wider knowledge of the conditions surrounding medical practice in the entire state of Michigan than he. He had not only seen pioneer life in the rugged northern counties of the state but had also practiced in one of the throbbing centers of industrial life. The medical profession of Michigan benefited from his unusual experience and rare judgment.

Dr. Moll was the first president-elect (1930) of the Michigan State Medical Society. Before this year, presidents of the

state society were elected by the membership at large and occasionally came to the position with very meager knowledge of the details of office. The inauguration of the custom of president-elect, the selection made by the House of Delegates, put the incoming president on a year's probation, after which, as constant attendant at the meetings of the council and executive committee, he entered upon the duties of office with a clearer understanding and experience of the problems of the medical profession. Such was Dr. Moll's training when he became president in 1931-32. He proved himself a very capable, self-sacrificing official.

Dr. Moll was a unique personality. The word "friendly" more than any other described him in his relations with all with whom he came in contact. He was gifted in conversation, which was to be expected from such a discerning and careful reader as he was. We have quoted on another occasion an estimate of him by the late Dr. C. B. Burr, himself a master of verbal expression, "I have never heard from him an unkind word or one in depreciation of a fellow practitioner; not that his attitude is negative, but characterized by a large charity for human failings or lapses; concerning these he is amused, or silent, or he ignores them, but he is never censorious." What a splendid tribute!

To his friends, Dr. Moll was a tower of strength; one always felt that in his presence one was in good company. Though early in his seventh decade, he was still young in spirit and action so that we must look upon him as one

" . . . on whom in the prime
Of life, with vigour undimmed,
With unspent mind, and a soul
Unworn, undebased, undecayed,
Mournfully grating the gates
Of the City of Death have forever closed—
Him, I count him, well starr'd."

MECHANIZING THE HEALING ART

By Lord Horder†

Today we are witnessing the apotheosis of the machine in human life, and it is not surprising to find that medicine, like other spheres of action, is being mechanized. The public has come to believe that machinery is revolutionizing the healing art

†Lord Horder is physician to King Edward VIII. These paragraphs were read at a meeting of the Medical Society of the State of New York.

and is dispensing with the need for human judgment.

It is true that the introduction of instruments of precision into medicine has been of great service, but the interpretation of the results obtained by them in the individual case still demands wisdom and experience on the part of the doctor. Where the machine is greater than the man, the patient perishes. A large section of the public does not know this. * * *

The path by which we regain that needed clinical acumen, as we must regain it in the patient's and our own interest, matters little: whether it be by the new road of clinical research or frustration, or economy or sheer mother-wit. We never should have left the path. And the sooner we return to it the better.

HOSPITAL'S RIGHT TO PRACTICE MEDICINE

Openly and frankly the Superintendents (some) now claim this right. Like the wild animal—having tasted blood in the form of "clinic fees"—they now propose to engage in active competition for public patronage. With hired "professional servants" they now would encroach upon the individual's field of opportunity. Behind the good name and public respect accorded the senior visiting staff—(as a window dressing to command public confidence)—they will submeter medical care through interns, technicians, and resident neophyte physicians for institutional profits. Every rule of conduct laid down by Medicine for the protection of the public and morally obligatory upon each individual physician, will be violated by the hospital corporation; advertising, solicitation, self praise, claim of superiority and "cut rate" fees. Add to this the advantages of "tax exemption" and the charity benefactions, and the preferential prices in purchase of supplies and the impossibility of meeting such competition is clearly evident. The ultimate consequence must be a general lowering of medical care standards for the community at large.—From the *New York State Medical Bulletin*, quoted by *Genesee County Medical Bulletin*.

HOME GATHERINGS

When neebors meet neebors on a cauld wintry nicht,
Tae spier aboot snaw an' th' rain an' th' sleet,
It's bonnie tae sit by th' ingle sae bricht,
An' veesit an' sing thae sangs that are sweet.

They're a' gaithered 'roon' verra close tae th' lum,
An' th' fun that they hae is clever an' clean,
Th' stories they tell are nae for th' dumb,
An' thier's never a word that's sordid or mean.

They'll hae some red apples that's sae guid tae eat,
An' maybe some cider that's poured frae th' jug,
An' doughnuts an' cookies or pies made o' meat,
Ane hand hauds th' cookies, th' ither th' mug.

An' there they sit laughin' a' sonsie an' bricht,
Aspinnin' yarns snappy, that's no been in type,
Wee Jock has th' funnies for Maggie's delicht,
An' th' faithers hae joined i' smokin' th' pipe.

Bring back thae auld gaith'rings weel known for
their fame,

Is th' cry we noo hear a' over th' land,
Then th' wee folk wull hae an interest in hame,
That's a'ways sae happy, delichtfu' an' grand.

Guid Nicht,
WEELUM.

JOUR. M.S.M.S.

MEDICO - LEGAL DEPARTMENT

NARCOTIC DRUG PRESCRIPTIONS

By MR. HERBERT V. BARBOUR†
Detroit, Michigan

We have found that many questions have arisen on the part of the various physicians as to the treatment which may properly be given wherein various narcotics have to be prescribed. It is impossible to state an inflexible rule which will cover all cases, but the Commissioner of the Bureau of Narcotics, through the Detroit office, has been very helpful in giving us information on this subject.

It can be stated, however, that as a general rule the final responsibility rests upon the physician in charge of the case. Good faith of the physician in his treatment in a given case will be established by the facts and circumstances of the case, and the consensus of medical opinion with regard thereto is based upon the experience of the medical profession in cases of similar nature.*

A reputable physician directly in charge of bona fide patients suffering from diseases known to be incurable, such as cancer, advanced tuberculosis, and other diseases well recognized as coming within this class may, in the course of his professional practice and strictly for legitimate medical purposes, dispense or prescribe narcotic drugs for such diseases, provided the patients are personally attended by the physician who regulates the dosage and prescribes no quantity greater than that ordinarily recognized by members of his profession to be sufficient for the proper treatment of the given case.

The danger of supplying persons suffering from incurable diseases with a supply of narcotics must be borne in mind, however, because such persons may use the narcotics wrongfully, either by taking excessive quantities or by disposing of a portion of the drugs in their possession to other addicts or persons not lawfully entitled thereto.

A careful review of the decisions as they exist at the present time makes clear the fact that when a physician is charged with unlawfully selling or prescribing drugs under the Harrison Act, the case turns largely upon his good faith in prescribing drugs to his regular patients for maladies requiring the administration of the drug or whether he prescribed for persons seeking his professional aid merely to procure the drug. In the latter case the physician might, perhaps, in a single instance afford temporary relief for one whose condition demanded immediate treatment. To go further than this would enable every doctor to do just what the defendant did here—furnish drugs to addicts or afford opportunity to them to procure all the narcotics they desired—as unrestrained they would go from one physician to another, and thus quickly destroy the whole purpose of the act in question. (Louis D. Barbot v. United States, 273 Fed. 919.)

It is to be kept in mind that mere addiction alone is not recognized as an incurable disease. Under the act, it seems necessary to divide the addicts not suffering from an incurable disease into two classes, viz.: (a) Those suffering from senility or the infirmities attendant upon old age, who are confirmed addicts of years standing and who, in the opinion of a reputable physician in charge, require a minimum amount of narcotics in order to sustain life; and (b) those whose addiction is not complicated by incurable disease or by the infirmities attendant upon old age.

Aged and infirm addict—Addicts suffering from senility or the infirmities attendant upon old age and who are confirmed addicts of years standing may be, for the purpose of enforcing the law, treated as addicts suffering from incurable diseases. In such cases, where narcotic drugs are necessary in order to sustain life, a reputable physician may prescribe or dispense the minimum amount necessary to meet the absolute needs of the patient. In this class of cases the physician issuing the prescription should make a statement on the prescription to the effect that the patient is aged and infirm, giving age, and certifying that the drug is necessary to sustain life, or, if he prefers, he may endorse upon the prescription "Exception 2, Article 85."

The ordinary addict—It is well established that the ordinary case of addiction yields to proper treatment, and that addicts will remain permanently cured when drug taking is stopped and they are otherwise physically restored to health and strengthened in will power. A physician may, in the course of his professional practice only, and in accordance with the consensus of medical opinion, afford temporary relief to an ordinary addict whose condition demands immediate attention by prescribing or dispensing the minimum quantity necessary to prevent his collapse and enable him to reach a hospital, institution, or place where treatment under proper restraint is to be undertaken. Such cases should be cautiously handled and the physician in charge should satisfy himself that the narcotics thus furnished are not to be diverted for an unlawful purpose, that steps looking toward such treatment actually have been, or promptly will be, taken, and that the conditions are such (usually indicated by the

*Expert testimony admissible as to proper method of treating addicts. *Reeves v. United States*, 263 Fed. 690.

†Mr. Barbour of Douglas, Barbour, Desenberg and Purdy is attorney for the Executive Board of Medical Defense, Michigan State Medical Society.

presence of a responsible accompanying nurse or attendant) that the addict cannot augment his supply of drug by securing additional amounts from another source. This Bureau has never sanctioned or approved the so-called reductive ambulatory treatment of addiction for the reason that where the addict controls the dosage he will not be benefited or cured. Medical authorities agree that the treatment of addiction, with a view to effecting a cure, which makes no provision for confinement while the drug is being withdrawn, is a failure, except in a relatively small number of cases where the addict is possessed of a much greater degree of will power than that of the ordinary addict.

Another question that has arisen in the minds of some doctors relative to the prescribing of narcotics is as to whether, where a patient needs a prescription refilled, it may be done by calling a druggist on the telephone. Article 90 of the Laws and Regulations Relating to the Importation, Manufacture and Dispensing of Narcotic Drugs reads as follows:

"Except as hereinafter provided, the furnishing of narcotics pursuant to telephone advice of practitioners is prohibited, whether prescriptions covering such orders are subsequently received or not. In an emergency, a druggist may deliver narcotic drugs through his employee or responsible agent pursuant to a telephone order, provided the employee or agent is supplied with a properly prepared prescription before delivery is made, such prescription to be turned over to the druggist and filed by him as required by law within a reasonable time after delivery."

It would appear from that article that a physician would be violating the law in merely calling a druggist and giving him authority to fill a prescription, even though it was for some person suffering with one of the incurable diseases mentioned earlier in this article.

The question in the end seems to devolve upon the good faith of the physician. The Bureau of Narcotics cannot lay down an inflexible rules, as the courts are continually interpreting the law, and it is, of course, impossible for them to say definitely what the interpretation may be.

A great portion of the material in this article was taken from a pamphlet issued by the Commissioner of the Bureau of Narcotics, and can be secured by any physician who wishes to write to the Bureau of Narcotics, Federal Building, Detroit, Michigan. Possibly the great majority of doctors are fully acquainted with the matters discussed in this article, but several inquiries on the matters discussed have prompted the writing of this article.

WHO MAY BE CALLED DOCTOR**

The use of the title "Doctor" or an abbreviation thereof, by each of the several groups or branches of the so-called healing arts is outlined herewith:

The use of conferred titles and degrees in social, religious, or academic activities is unrestricted by the laws governing the several branches of the so-called healing arts. The use of titles and degrees in activities or business pertaining to the cure, alleviation, or correction of human ailments or disabilities, is defined and restricted.

Section 9 of Act 237 of the Public Acts of 1899, as amended (Section 6745 of the Compiled Laws of 1929) reads in part as follows:

"Any person who shall append the letters 'M.D.' or 'M.B.' or other letters in a medical sense, or shall prefix the title 'doctor' or its abbreviation, or any sign or appellation in a medical sense, to his or her name, it shall be prima facie evidence of practicing medicine within the meaning of this act."

Further, Section 6743 of the Compiled Laws of 1929 reads in part as follows:

"Any person who shall practice medicine or surgery in this state * * * and who is not the lawful possessor of a certificate of registration or license issued under and pursuant to Act 237 of the Public Acts of 1899, or acts amendatory thereto, or without first complying with the provisions of this act * * * shall be guilty of a misdemeanor."

The sections above quoted indicate that the use of the title "Doctor" in a medical sense is limited to those authorized to practice medicine under the provision of Act 237 of the Public Acts of 1899, as amended. In the Act itself, however, there are certain exceptions. Other acts have defined and provided for a limited use of the title "Doctor." These exceptions and provisions, relating to particular groups of the so-called healing arts, will be treated under separate subdivisions hereof as follows:

1. *Optometrists*.—The use of the title "Doctor" by optometrists is further controlled by Section 6788 of the Compiled Laws of 1929, a part of the Optometry Act:

"Sec. 8. Nothing in this act shall be construed as conferring on the holder of any certificate of registration issued by said board, the title 'doctor,' 'oculist' or 'ophthalmologist,' or any other word or abbreviation indicating that he is engaged in the practice of medicine or surgery, or the treatment of diseases of or injuries to the human eye, or to the right to use drugs or medicine in any form for the treatment or examination of the human eye.

"It shall be unlawful:

"(a) For any person registered under this act to practice medicine or surgery within the provisions of act number two hundred thirty-seven (237) of the Public Acts of eighteen hundred ninety-nine (1899), or acts amendatory thereto, or to use any title or appellation used in a sense to indicate the practice of medicine, or to use the title 'Doctor,' or the prefix, 'Dr.,' unless such title has been properly conferred upon said person by a state university or legally chartered college or school of optometry legally empowered to confer such title of doctor or doctorate degree; Provided, however, That any person registered under this act shall, if he uses the title or appellation of 'Doctor' or 'Dr.,' add thereto the word 'optometrist';"

The provision as to such exceptions must be strictly construed, being in derogation of the provision against the use of the title "Doctor." The first paragraph of Section 6788, as above quoted, indicates the intention of the legislature to adhere to this strict construction.

The last two paragraphs above quoted, taken together, are to the effect that optometrists are not given the right to use the title "Doctor" unless it

*These communications have been received by Dr. J. E. McIntyre, secretary of the Michigan State Board of Registration in Medicine. They concern the interpretations on the various subjects dealt with by the attorney general of Michigan. They are published here as received without any attempt at condensation.

be conferred by a school of optometry, in which case the title must be qualified by words indicating that the doctorate is in the subject of optometry, and not in medicine. The word "thereto" refers not to the name of the person but to the title. It follows that the qualifying words must appear in juxtaposition with the title, so that it will in no event mislead the public into believing that the individual named is a "doctor" in the common meaning, authorized to practice medicine. Placing the qualifying words after the name rather than after the title "Doctor" would give the public the impression that the individual is a medical doctor specializing in, and authorized to practice optometry. The express provision in the statute against the use of the title "Doctor" would indicate that the legislature intended that an optometrist use the title only when qualified as provided.

In short, it is our opinion that an optometrist, if he uses the title "Doctor," must append the descriptive words immediately thereto as follows: "John Jones, Doctor of Optometry," or "John Jones, D. Opt.," etc., as the particular doctor degree may be worded. He cannot, however, use the title in this manner: "Dr. Jones, Optometrist," in connection with his professional practice.

2. *Chiropodists*.—The use of the title "Doctor" by a chiropodist is further defined and controlled by Section 6801 of the Compiled Laws of 1929, a part of the Chiropody Act.

This section provides:

"Sec. 8. If any person shall use the name or title 'Chiropodist' or 'M.Cp.' or 'D.S.C.' or the words 'Foot designate him as a chiropodist or imply that he was or is qualified to practice chiropody under the provisions of this act, it shall be deemed prima facie evidence of practicing chiropody within the meaning of this act."

The language of this act impliedly indicates that a chiropodist may use the title "D.S.C.," or "Doctor of the Science of Chiropody" when duly conferred upon him, in connection with his practice. It does not, however, authorize him to prefix the title "Doctor" before his name or add the word "Doctor" without the full descriptive title of his degree standing together, in juxtaposition.

From the language of the extracts quoted, it must be concluded that a chiropodist cannot prefix the title "Doctor" before his name or use the title "Doctor" in any way, except that if a doctorate degree has been conferred upon him by a college or school authorized to confer such degree, he may append such degree to his name, provided, however, that the descriptive words of such degree are placed immediately before or after, or in juxtaposition with the title "Doctor." In short, he may not use the title "Doctor" in the following manner: "Doctor John Jones, Chiropodist." He may, however, use the title in this manner: "John Jones, D.S.C.," or using other descriptive words relative to his degree.

3. *Chiropactor*.—As to the use of the title "Doctor" by chiropactors, we quote, with approval, a ruling of this Department on July 11, 1935, in which it was held:

"The intention of the Legislature seems to be clearly stated in this statute. It states that a chiropactor cannot use the title of 'doctor' or 'professor' in any form; and it further states that a chiropactor shall use no other sign or appellation which would designate him as a physician or surgeon. It would seem from the wording of this statute that the legislature felt that the use of the word 'doctor' in any form would mislead the public and, therefore, made it unlawful for a chiropactor to use such a title. However, the legislature went even further and stated that it would also be unlawful for a chiropactor to use any sign other than 'doctor' or 'professor,' which would designate him as a doctor or surgeon.

"In interpreting a statute, it is necessary to determine

the intention of the legislature from the wording of the particular statute. From a reading of the statute in question it seems clear that the legislature did not intend that a chiropactor be permitted to use the title 'doctor' in any form."

4. *Osteopath*.—The use of the title "Doctor" by osteopaths is not controlled by the quoted provisions of the Medical Act, for the reason that Section 8 of the Medical Act (Sec. 6744 of the Compiled Laws of 1929) expressly provides that the Medical Act shall not be applicable to osteopaths practicing under the provisions of the Osteopathy Act.

The distinction between the practice of medicine and the practice of osteopathy is recognized in Section 6763 of the Compiled Laws of 1929 of the Osteopathy Act, which declares that the practice of osteopathy is not the practice of medicine. This distinction is further recognized in Section 6760 of the Compiled Laws of 1929, of the Osteopathy Act, which provides that osteopaths shall not practice medicine and surgery within the meaning of the definition contained in the Medical Act. Osteopaths, confining their practice to the field of osteopathy, and holding themselves out as osteopaths, are, like dentists who are engaged in the legitimate practice of their profession, excepted from the provisions of the Act and may freely use the title "Doctor."

If a dentist were to hold himself out simply as a doctor, placing the title "Doctor" before his name on signs, doors, windows or stationery, without indicating that he is a dentist, he might be guilty of fraud and deception, and of obtaining money under false pretenses in receiving any fee from a patient seeking medical advice or treatment from him, thinking he is a doctor in the ordinary common meaning of the word. He might be likewise guilty of practicing medicine, in representing himself as a "doctor" in the ordinary sense, as he is within the exception according to the statute only as long as he confines himself to the legitimate practice of dentistry. In simply using the title "Doctor" in the course of his dental practice, the dentist does not give the impression that he is trained or licensed to practice medicine, as he usually carries the distinguishing description on his professional signs, stationery, etc., and makes it obvious at all times that he is confining his services to dentistry.

The comments on the use of the title "Doctor" by dentists, apply to the osteopath. While the osteopath is free to use the title "Doctor," he must, however, avoid all misleading advertisements or references to himself as a doctor in the ordinary and common usage of the word by the public generally, connoting the authority to practice medicine as defined in the Medical Act.

5. *Dentistry*.—The use of the title "Doctor" by dentists is discussed at length under the foregoing paragraph relative to osteopaths. It is there pointed out that the provisions of the Medical Act do not apply where the dentist confines his practice to the field of dentistry, and that dentists may freely use the title "Doctor," or its abbreviation, provided, of course, that there be no misrepresentation as to the fact that he is a dentist.

6. *Religious Groups*.—There are groups who profess the ability to alleviate ills by prayer. The Medical Act likewise excepts persons who confine their ministrations to the sick or afflicted to prayer and without the use of material remedies. The statute recognizes the distinction between religious activities and the practice of medicine. The person who administers such prayer may have a doctorate in divinity, and may properly use the title "Doctor" in the course of such religious activity.

He cannot, however, use the title to mislead the public, or anyone, into believing he is trained or authorized to diagnose ills or disabilities, or to apply any medical science or use any therapeutic agents whatsoever. The comments under the paragraph relative to osteopathy are likewise applicable.

I have gone into each branch of the so-called healing groups in exhaustive detail and comment to cover the several inquiries heretofore submitted by each of the several groups. In passing upon these questions, I cannot be concerned with the comparative merit of the various "schools" of healing, nor the advisability of any of the acts referred to. Any change of the law must emanate from the Legislature, not by force of any opinion from this Department.

Yours very respectfully,

DAVID H. CROWLEY
Attorney General

By JAMES F. SHEPHERD
Deputy Attorney General

A Word About Insurance Companies

The relationships between physicians and insurance companies, as a whole, are relatively pleasant ones; however, every now and then an unscrupulous company shows up which looks upon the physician as a proper person to mulct and impose upon. Letters are sent out asking for information and opinions without the least mention of compensation; yes, they often don't ask, but put the proposition, "The Home Office requires." If the keeper of the exchequer is not too close, a stamped envelope may be enclosed for the convenience of the doctor. If the first letter doesn't get results in a few days, along comes another worded strongly enough to make the doctor hurry. The third one, if necessary, gets pretty warm and puts the hesitant physician on the spot for his injustice to his former patient. Ask two dollars for your time and opinion and see what you get; probably a flat refusal, or a compromise offer. Many times no written authority is submitted from the person seeking insurance, or else the questions are of such a nature that to answer them would lay anyone liable to civil suit.—From *The Bulletin* of the Genesee County Medical Society.

THE DEPARTMENT OF POSTGRADUATE MEDICINE OF THE UNIVERSITY OF MICHIGAN

and

THE MICHIGAN STATE MEDICAL SOCIETY

Present

A Program in Postgraduate Medicine

Alpena, Michigan

Wednesday, June 10, 1936

Trinity Parish House

PROGRAM

A.M.

10:00	Non-tuberculous disease of the chest.	Dr. Douglas Donald Dr. J. C. Kenning
11:00	Interpretation of chest films.	Dr. J. C. Kenning
11:30	The recognition and management of latent syphilis.	Dr. Loren Shaffer

P.M.

12:30	Luncheon.	
2:00	Heart disease.	Dr. Douglas Donald Dr. J. C. Kenning
3:00	Common skin lesions. Diagnosis and treatment. Clinic.	Dr. Loren Shaffer

DEPARTMENT OF SOCIETY ACTIVITY

C. T. EKELUND, M.D., Secretary

COUNCIL CHAIRMAN'S COMMUNICATION

Study of Problems in Your County

HAS your county medical society conducted a recent study of the medico-social problems in your community—problems that must be solved, in the interests of the physician and the public he serves?

The Chairman of the Medical Economics Committee of the Michigan State Medical Society has sent a letter to the officers of every county medical society in Michigan, urging them to find out just what the medical profession in their territory is doing along certain social and economic lines, what has been done during the past twelve months, and what it hopes to accomplish in the next year. As a suggestion for this survey, the following outline of subjects which might be the basis for such a study has been sent to the president and secretary of each county society.

It is my hope that a study of the social aspects of sickness will be inaugurated immediately by each county unit and vigorously carried out. The findings and conclusions should be received by the State Society not later than August 1, to aid in the adoption of a state-wide program of medical economics for the future. Officers: Develop a well-rounded program and execute this project at once!

Suggested Subjects For Study

A. Lay Coöperation:

1. Have you an agreement between physicians and county poor commission for medical care of afflicted adults in your county?
2. Have you a special agreement with county officials for fees out of county treasury for medical care of afflicted children in your county?
3. Are all members of your county medical society sending bills to the state (through the hospitals) for medical and surgical care of afflicted and crippled children?
4. Have you an agreement with county poor commissioners to refer all persons requesting tax-supported medical care first to the

physician? Or is the physician ignored and told to care for the patient free or at greatly reduced fees, without being given the opportunity to accept temporarily-embarrassed people as private patients? In other words, are physicians given the chance to care for all borderline patients who may be pay-patients some day? Or are the patients all being trained to the "free medicine" habit?

5. Have you urged county officials to have all persons seeking tax-supported medical care first examined by a committee of physicians or by the family physician? Many now hospitalized might be given home or office medical care, thus saving thousands of dollars for the county, and insuring a reasonable fee for the physician; has this been pointed out to your county officials?
 6. Have you ascertained the attitude of your probate judge re aid to dependent children (including medical care) and to women receiving Mothers' Pensions? This is now tied up with the Social Security Act.
 7. Relief Medicine. In Europe, the medical poor are the responsibility of the public. In America, the medical poor are the responsibility of the physician! This is a vast subject. One meeting of your county medical society could be given to a discussion of the medical relief problems in your district. A study of the SERA surveys and monthly reports is recommended. (Write George Granger, Bauch Building, Lansing, for information.)
 8. Abuses of the title "Doctor." See Opinion of Attorney General in THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY, May, 1936, issue. Contact your Prosecuting Attorney re violations.
 9. Develop program of coöperation with newspapers, to give them correct viewpoint on medical matters and to discourage their dispensing medical advice and treatment, in syndicated articles, not authorized by your county medical society.
 10. Develop a Speakers Bureau, to contact lay groups, to give the medical viewpoint.
- #### B. Coördination of Medical Services:
11. Study postpayment plan, organized and run by county medical society to readily provide medical services to the low-wage group.
 12. Study of group hospitalization (hospital insurance).
 13. Study of pay diagnostic clinics.
 14. Study of the problem of laboratories manned by laymen.
 15. Develop physicians' representation on hospital boards.
 16. Study of rural medicine.

SOCIETY ACTIVITY

C. Public Health Relations:

17. Preventive Medicine is important. The more sick the patient, the less the fee to the physician. What is your county medical society doing? Is the value of the periodic health examination being stressed? This leads to a better physician-public contact, cementing the family doctor relationship.
18. Medical Participation. Can this be used in your district?
19. Vital statistics law. Is coöperation good? Any problems?
20. Problems with the public health nurse?
21. School health examinations. Are the forms so worded that they give greater encouragement to parents to take children to a private practitioner, and thus save tax funds? Is the medical society stimulating contagious disease education and work in the physicians' private offices?
22. Tuberculosis education and prevention work. Postgraduate study for your physicians. Exhibit to laity. (Note: See PRC Letter No. 2, dated April 23, 1936.)
23. Social hygiene. Is this work under the supervision of the private doctor? What education of the public is being done by the county medical society?
24. Pneumonia. Education of the public.

D. Industrial Relations:

25. Workmen's Compensation. The questionnaire to your membership should cover this important subject. Study of the New York Law; the Milwaukee plan. Labor board hearings and testimony. The expert witness. The unethical doctor and the shyster lawyer.
26. Unauthorized practice of medicine by certain hospitals, department stores, factories, insurance companies, utilities, etc. Also by some pharmacists.
27. Sickness insurance practice by fraternal lodges, etc.
28. Relationships with industrial surgeons.

HENRY COOK, M.D.

ANALYSIS OF COUNTY MEDICAL COSTS

APPENDED herewith are tabulated figures of medical costs under ERA for February and March, 1936. Physicians should be interested in comparisons with other counties. The tabulation may be of considerable value in offsetting the recently expressed desire of some County Boards of Supervisors to regain control of emergency relief. The House of Delegates of the Michigan State Medical Society has gone on record as favoring centralized control with uniform type of administration in all counties. It is not hard to imagine the difficulties which may arise, in many counties at least, if this responsibility is returned to the counties.

ANALYSIS OF COUNTY MEDICAL COSTS

February, 1936

Counties	Total Relief Cases	Total Medical Cases	Total Medical Costs	Costs Per Medical Case	Costs Per Relief Case
Alcona	136	29	\$ 182	\$6.27	\$1.33
Alger	201	26	74	2.84	.36
Allegan	703	54	219	4.05	.31
Alpena	247	26	50	1.92	.20
Antrim	256	35	137	3.91	.53
Arenac	156	24	208	8.66	1.33
Baraga	190	26	99	3.80	.52
Barry	362	87	409	4.70	1.12
Bay	1,470	465	1,225	2.63	.83
Benzie	353	57	336	5.89	.95
Berrien	1,676	170	336	1.97	.20
Branch	371	45	142	3.15	.38
Calhoun	1,675	171	827	4.83	.49
Cass	539	76	493	6.48	.91
Charlevoix	452	49	100	2.04	.22
Cheboygan	381	50	348	6.96	.91
Chippewa	348	82	428	5.21	1.22
Clare	356	55	245	4.45	.68
Clinton	421	51	421	8.25	1.00
Crawford	135	23	104	4.52	.77
Delta	1,287	217	991	4.56	.77
Dickinson	810	69	365	5.28	.45
Eaton	469	59	293	4.96	.62
Emmet	320	29	112	3.86	.35
Genesee	2,894	1,050	5,590	5.32	1.93
Gladwin	135	15	50	3.33	.37
Gogebic	943	126	831	6.59	.88
Grand Traverse...	379	18	36	2.00	.94
Gratiot	665	84	432	5.14	.64
Hillsdale	433	57	186	3.26	.42
Houghton	1,801	321	1,292	4.02	.71
Huron	280	8	67	8.37	.23
Ingham	2,435	636	2,466	3.87	1.01
Ionia	748	142	662	4.66	.88
Iosco	219	41	254	6.19	1.15
Iron	622	110	585	5.31	.94
Isabella	253	41	309	7.53	1.22
Jackson	3,153	533	2,470	4.63	.78
Kalamazoo	1,475	579	1,437	2.48	.97
Kalkaska	134	20	75	3.75	.55
Kent	4,964	1,455	4,087	2.80	.82
Keweenaw	176	20	123	6.15	.69
Lake	196	25	122	4.88	.62
Lapeer	347	81	549	6.77	1.58
Leelanau	174	11	29	2.63	.16
Lenawee*	677	..	..	..	..
Livingston	256	25	169	6.76	.66
Luce	107	20	57	2.85	.53
Mackinac	205	31	306	9.87	1.49
Macomb	927	103	384	3.72	.41
Manistee	444	73	384	5.26	.86
Marquette	792	92	859	9.33	1.08
Mason	359	23	108	4.69	.30
Mecosta	355	76	216	2.84	.60
Menominee	570	52	290	5.57	.50
Midland	247	40	260	6.50	1.05
Missaukee	165	41	247	6.02	1.49
Monroe	530	74	397	5.36	.74
Montcalm	676	136	429	3.15	.63
Montmorency	130	13	95	7.30	.73
Muskegon	1,587	286	1,337	4.67	.84
Newaygo	362	39	140	3.58	.38
Oakland	3,724	962	3,516	3.65	.94
Oceana	257	49	161	3.28	.62
Ogemaw	202	51	364	7.13	1.80
Ononagon	210	22	129	5.86	.61
Osceola	259	22	264	12.00	1.01
Oscoda	90	28	227	8.10	2.52
Otsego	133	16	56	3.50	.42
Ottawa	411	42	151	3.59	.36
Presque Isle	165	11	60	5.45	.36
Roscommon	100	12	121	10.00	1.21
Saginaw	2,063	235	705	3.00	.34
Sanilac	267	30	97	3.23	.36
Schoolcraft	232	56	209	3.73	.90
Shiawassee	703	83	497	5.98	.70
St. Clair	1,441	146	493	3.37	.34
St. Joseph	461	38	125	3.28	.27
Tuscola†	369	6	5	.83	.01
Van Buren	711	35	179	5.11	.25
Washtenaw	1,315	75	591	7.88	.44
Wayne	26,851	6,744	14,589	2.16	.54
Wexford	733	27	74	2.74	.10
Entire State	84,826	17,162	\$58,091	\$3.38	\$.68

*County pays all medical costs.

†County pays most of medical costs.

ANALYSIS OF COUNTY MEDICAL COSTS

March, 1936

Counties	Total Relief Cases	Total Medical Cases	Total Medical Costs	Costs Per Medical Case	Costs Per Relief Case
Alcona	144	27	\$ 161	\$5.96	\$1.11
Alger	199	30	145	4.83	.72
Allegan	683	39	106	2.71	.15
Alpena	227	22	52	2.36	.22
Antrim	236	37	164	4.43	.69
Arenac	168	21	87	4.14	.51
Baraga	184	31	89	2.87	.48
Barry	337	93	461	4.95	1.36
Bay	1,466	1,414	2,363	1.67	1.61
Benzie	340	31	338	10.90	.99
Berrien	1,612	172	324	1.88	.20
Branch	339	39	107	2.74	.31
Calhoun	1,564	184	778	4.22	.48
Cass	494	89	482	5.41	.97
Charlevoix	429	61	152	2.49	.35
Cheboygan	331	48	284	5.91	.85
Chippewa	346	44	228	5.18	.65
Clare	247	43	213	4.95	.86
Clinton	375	49	342	6.97	.91
Crawford	117	31	159	5.12	1.35
Delta	1,203	184	736	4.00	.61
Dickinson	739	103	296	2.87	.40
Eaton	397	45	230	5.11	.57
Emmet	315	34	124	3.64	.39
Genesee	3,159	1,005	7,407	7.37	2.34
Gladwin	135	18	78	4.33	.57
Gogebic	1,012	123	638	5.18	.63
Grand Traverse	343	34	57	1.67	.16
Gratiot	604	72	421	5.84	.69
Hillsdale	365	43	150	3.48	.41
Houghton	1,674	341	1,906	5.58	1.13
Huron	231	21	56	2.66	.24
Ingham	2,512	658	2,713	4.12	1.08
Ionia	726	140	665	4.75	.91
Iosco	219	49	348	7.10	1.58
Iron	583	113	870	7.69	1.49
Isabella	230	53	337	6.35	1.46
Jackson	3,120	747	4,100	5.48	1.31
Kalamazoo	1,422	581	2,266	3.90	1.59
Kalkaska	143	25	116	4.64	.81
Kent	5,081	1,900	6,440	3.38	1.26
Keweenaw	174	15	69	4.60	.39
Lake	198	27	107	3.96	.54
Leapeer	311	80	624	7.80	2.00
Leelanau	152	6	8	1.33	.05
Lenawee*	669	..	..	..	..
Livingston	225	36	201	5.58	.89
Luce	103	25	55	2.20	.53
Mackinac	227	55	357	6.49	1.57
Macomb	957	84	339	4.03	.35
Manistee	416	90	374	4.15	.89
Marquette	747	46	221	4.80	.29
Mason	327	18	62	3.44	.18
Mecosta	383	78	377	4.83	.98
Menominee	595	55	340	6.18	.57
Midland	204	79	465	5.88	2.27
Missaukee	157	45	292	6.48	1.85
Monroe	466	88	480	5.45	1.03
Montcalm	651	149	496	3.32	.76
Montmorency	115	16	91	5.69	.79
Muskegon	1,607	364	2,096	5.75	1.30
Newaygo	322	58	289	4.98	.89
Oakland	3,828	1,223	5,371	4.39	1.40
Oceana	246	56	196	3.50	.77
Ogemaw	197	42	205	4.88	1.04
Ontonagon	207	44	236	5.36	1.14
Osceola	242	36	379	10.52	1.56
Oscoda	70	14	70	5.00	1.00
Otsego	120	20	80	4.00	.66
Ottawa	397	52	259	4.98	.65
Presque Isle	131	14	63	4.50	.48
Roscommon	100	21	139	6.61	1.39
Saginaw	2,175	297	1,145	3.85	.52
Sanilac	259	35	144	4.11	.55
Schoolcraft	214	57	267	4.68	1.24
Shiawassee	708	93	404	4.34	.57
St. Clair	1,467	170	657	3.86	.46
St. Joseph	427	59	178	3.01	.41
Tuscola†	344	7	10	1.42	.02
Van Buren	711	44	232	5.27	.32
Washtenaw	1,240	70	579	8.27	.46
Wayne	27,951	13,474	20,211	1.50	.72
Wexford	695	13	31	2.38	.04
Entire State	84,799	26,049	\$75,188	\$2.88	\$.88

*County pays all medical costs.

†County pays most of medical costs.

MENTAL HYGIENE

ELSEWHERE in this section appear the minutes of the first meeting of Committee on Mental Hygiene of the Michigan State Medical Society. Perusal of this record should be of interest and importance to every clinician in this state. One of the most interesting changes taking place in medical practice is the marked increase in the number of patients seeking relief for functional or nervous disorders. It has been estimated that almost half of the mine run of patients seeking medical advice have functional, or nervous disorders with only minor organic disturbances. Yet it is notorious that the average physician has little interest in, and small qualifications for, treating this type of patient. They are, in large measure, the easy prey of quacks who, by their very technique and practice of emphasizing minor ailments, inevitably contribute to the chronicity of the nervous imbalance itself.

Michigan is both mentally and physically "retarded" in its development in this field; mentally, in that the point of view of the medical profession and of the laity is one of hopelessness toward the mentally sick, and physically, in that the physical facilities for the housing and treatment of the more serious forms of mental disorders are so woefully inadequate. At the present time state institutions are overcrowded by 1,767 insane patients, by 926 in the institutions for the feeble-minded, and by 294 in the home for epileptics. Besides this, there are 2,105 on the waiting lists for these institutions, persons who have actually been committed but for whom there is not room!

It is the opinion of the Building Committee for the State Hospital Commission that the State of Michigan requires 40 beds per 100,000 of population for epileptics; 120 beds per 100,000 of population for feeble-minded; 298 beds per 100,000 of population for civil insane; 17 beds per 100,000 of population for dangerous and criminal insane, or a total of 315 beds for all insane. At present there are facilities for 172 insane per 100,000 of population, or, if the Wayne County institution at Eloise is included, the total is 236 beds per 100,000 of population. In New York the total is somewhere in the neighborhood of 450.

Some one has said that one in twenty-five of children now attending school will spend

some time during his life in an institution for the mentally sick. Modern psychiatry holds that much mental illness is preventable; that if the early stages of, say, a schizophrenic personality are recognized and proper environmental adjustments are made, the development of a complete breakdown may be delayed, or averted entirely. The difficulty is the inaccessibility of adequate care in mental hygiene. If knowledge and understanding of these mental ills were a part of the equipment of at least a few physicians in each community much good could be accomplished.

There is now in process of organization the Michigan Society for Mental Hygiene, a non-profit organization incorporated under Act 327 of the Public Acts of 1931, the purpose of which is "to engage exclusively in charitable, scientific, literary and educational activities leading to the promotion and conservation of the mental health of the people of Michigan; to study the cure and prevention of nervous and mental disorders and mental defects; and in general to the promotion of the welfare of mankind."

With such a program, the Michigan State Medical Society finds itself in hearty accord and its Committee on Mental Hygiene will lend its efforts toward the further enlightenment of the medical profession in the state in matters of mental hygiene. If the profession at large can be made aware of the mental processes through which unsocial and antisocial personalities are evolved it should not become necessary for one in twenty-five of our children to find themselves one day in such an unfortunate state.

COMMITTEE DECISIONS

Seven points to govern the conduct of the maternal and child health program in Michigan, under the Social Security Act, have been agreed upon by the State Health Department and the Michigan State Medical Society. (See item 3 of Executive Committee Minutes of April 22, 1936.)

* * *

Plans for the future must be considered by each county medical society. As the physician's guild, it must study the problems confronting him in his own community and attempt to solve them. Where the same problems exist in a majority of the counties, the solution becomes a project of the State Society. A survey of the work on economic, social, and legislative activity in every county should be made by the officers of the medical society at once. (See the Council Chairman's Communication in this issue of THE JOURNAL; also item 9 of Legislative Committee Minutes of April 25, 1936.)

"**Allegiance** should be first to the county medical society . . ." (See item 5 of minutes of Public Relations Committee of May 7, 1936.)

* * *

When the Councilor in your district requests your county medical society to hold regular meetings, he is merely following the instructions of the Executive Committee of The Council, as per item 13a of meeting of April 22. If the individual physician is to be aided, he must know about the problems confronting him; this requires regular meetings to which your Councilor and members of the Public Relations Committee may be invited.

* * *

A recommended list of regulations or conditions—precedent which county medical societies might present to proper authorities before they approve the installation of county health units is offered by the Public Relations Committee. (See item 8 of meeting of May 7.)

* * *

"**Five per cent** of the beds in existing state hospitals could be emptied if qualified medical talent were available to whom the patient could be referred in his own community. Unless the profession at large interests itself in mental hygiene, the state must perforce discharge this obligation through salaried physicians." (See minutes of Mental Hygiene Committee, meeting of April 30, 1936.)

COUNCIL AND COMMITTEE MEETINGS

1. **May 1, 1936**—Scientific Exhibits Committee. Detroit—11:00 A. M.
2. **May 5, 1936**—Subcommittee on Postgraduate Medicine for General Practitioners. Detroit Club—12:15 p. m.
3. **May 6, 1936**—Section Officers—Wayne County Medical Society Bldg., Detroit—6:30 p. m.
4. **May 7, 1936**—Public Relations Committee with Wayne County Medical Society Filter Board and Probate Judge—Statler Hotel, Detroit, 6:30 p. m.
5. **May 17, 1936**—Maternal Health Committee—Olds Hotel, Lansing—10:00 a. m.
6. **May 21, 1936**—Subcommittee on Postgraduate Medicine for General Practitioners—Detroit Club—12:15 p. m.
7. **May 22, 1936**—Joint Committee on Public Health Education—Michigan Union—Ann Arbor, 12:00 noon.
8. **May 22, 1936**—Executive Committee of the Council—Statler Hotel, Detroit—6:30 p. m.
9. **May 23, 1936**—Chairmen of Detroit Committees on Arrangements for 1936 Annual Meeting, Michigan State Medical Society—Wayne County Medical Society Bldg., Detroit—12:30 p. m.
10. **May 23, 1936**—Legislative Committee—Ann Arbor—6:00 p. m.
11. **May 27, 1936**—Medical Economics Committee with three Sections of Medical Economics Commission of Wayne County Medical Society—Wayne County Medical Society Bldg., Detroit—1:30 p. m.
12. **June 10, 1936**—Public Relations Committee with the Preventive Medicine Committee—Olds Hotel, Lansing—1:30 p. m.

**HOUSE OF DELEGATES, MICHIGAN
STATE MEDICAL SOCIETY, 1936**

Alpena-Alcona-Presque Isle

F. J. O'Donnell, Alpena

Barry

R. B. Harkness, Hastings

Bay-Arenac-Isoco-Gladwin

L. Fernald Foster, Shearer Bldg., Bay City

Berrien

R. S. Snowden, Buchanan

Branch

R. L. Wade, Coldwater

Calhoun

Harvey Hansen, Battle Creek

A. T. Hafford, Albion

Cass

W. C. McCutcheon, Cassopolis

Chippewa-Mackinac

J. G. Blain, Sault Ste. Marie

Clinton

Dean W. Hart, St. Johns

Delta

J. J. Walch, Escanaba

Dickinson-Iron

(not yet named)

Eaton

A. G. Sheets, Eaton Rapids

Genesee

F. E. Reeder, Flint

George Curry, Flint

Third delegate to be chosen.

Gogebic

W. E. Tew, Bessemer

Grand Traverse-Leelanau-Benzie

E. F. Sladek, Traverse City

Gratiot-Isabella-Clare

Wm. E. Barstow, St. Louis

Hillsdale

O. G. McFarland, North Adams

Houghton-Baraga-Keweenaw

Geo. C. Stewart, Hancock

Huron-Sanilac

D. D. McNaughton, Argyle

Ingham

L. G. Christian, Lansing

Harold W. Wiley, Lansing

C. F. DeVries, Lansing

Ionia-Montcalm

F. H. Ferguson, Carson City

Jackson

Philip A. Riley, Jackson

James J. O'Meara, Jackson

Kalamazoo-VanBuren-Allegan

F. T. Andrews, Kalamazoo

R. G. Cook, Kalamazoo

Chas. TenHouten, Paw Paw

Kent

B. R. Corbus, Grand Rapids

Leon Sevey, Grand Rapids

Wm. R. Torgerson, Grand Rapids

A. V. Wenger, Grand Rapids

Carl F. Snapp, Grand Rapids

Lapeer

D. J. O'Brien, Lapeer

Lenawee

A. W. Chase, Adrian

Livingston

H. G. Huntington, Howell

Luce

R. E. Spinks, Newberry

Macomb

A. B. Bower, Armada

Manistee

K. M. Bryan, 111 Maple St., Manistee

Marquette-Alger

V. Vandeventer, Ishpeming

Mason

Lars W. Switzer, Ludington

Mecosta-Osceola

Geo. W. Yeo, Big Rapids

Menominee

Edward Sawbridge, Stephenson

Midland

David Littlejohn, Midland

Monroe

Dean Denman, Monroe

Muskegon

Roy H. Holmes, Muskegon

Newaygo

O. D. Stryker, Fremont

Northern Michigan

Guy C. Conkle, Boyne City

Oakland

Ernest Bauer, Hazel Park

Otto Beck, Birmingham

Oceana

W. Lemke, Shelby

O. M. C. O. R. O.

C. R. Keyport, Grayling

Ontonagon

E. J. Evans, Ontonagon

Ottawa

E. A. Stickley, Coopersville

Saginaw

Election deferred.

St. Clair

A. L. Callery, Port Huron

St. Joseph

R. A. Springer, Centerville

Schoolcraft

Gail Broberg, Manistique

Shiawassee

I. W. Greene, Owosso

Tuscola

O. G. Johnson, Mayville

Washtenaw

John Sundwall, Ann Arbor

John Wessinger, Ann Arbor

Dean W. Myers, Ann Arbor

Wexford

W. Joe Smith, Cadillac

Wayne (All delegates from Detroit)

R. C. Jamieson, T. K. Gruber, J. M. Robb,

Ralph H. Pino, L. J. Hirschman, Fred H. Cole,

Jos. H. Andries, H. A. Luce, W. D. Barrett,

Wm. J. Cassidy, Wm. J. Stapleton, F. B. Burke,

Wm. R. Clinton, Douglas Donald, A. E. Cather-

wood, A. P. Biddle, S. W. Insley, Harry F.

Dibble, Angus MacLean, Chas. R. Kennedy,

John L. Chester, E. D. Spalding, C. F. Brunk,

Frank A. Kelly, H. W. Plaggemeyer, H. W.

Yates, Chas. E. Dutchess, David I. Sugar,

A. W. Blain, P. L. Ledwidge.

**MINUTES OF MEETING OF THE
ADVISORY COMMITTEE ON
POSTGRADUATE EDUCATION
Book-Cadillac Hotel**

Detroit, March 3, 1936

Present:

Dr. J. D. Bruce, Chairman, Ann Arbor.
Dr. Henry Cook (as Chairman of the Council),
Flint,
Dr. C. T. Ekelund (as Secretary), Pontiac,
Dr. James H. Dempster (as Editor), Detroit,
Dr. A. P. Biddle (representing profession at
large), Detroit,
Dr. B. R. Corbus (representing profession at
large), Grand Rapids,
Dr. James E. Davis (representing profession at
large), Detroit,
Dr. J. V. Jackson (representing profession at
large), Kalamazoo,
Dr. J. M. Robb (representing profession at large),
Detroit,
Dr. C. C. Slemons (State Health Commission-
er), Lansing,
Dr. H. H. Cummings (Assistant Director of
Postgraduate Education), Ann Arbor,
Dr. Henry E. Vaughan, Visitor, Detroit.

1. The meeting was called to order at 10 A. M. by Dr. James D. Bruce, Chairman. Dr. Bruce summarized the postgraduate activities of the past year with especial reference to the Regional Postgraduate Conferences held in five centers in the fall of 1935. Dr. Bruce spoke from a large spot map showing the attendance at each of the five centers. The record showed total attendance of 822 divided as follows:

Grand Rapids.....	234
Flint	169
Battle Creek-Kalamazoo.....	197
Bay City.....	147
Traverse City-Cadillac-Manistee.....	75

These five centers have been found to be available to a large proportion of physicians and their continuance for the coming year would seem definitely to be desired.

In addition, it is highly desirable that some program be evolved for the benefit of the Upper Peninsula. Most physicians of the Upper Peninsula live in the western half of that segment of the state, and accordingly, it seems advisable that a program be held in Houghton, Marquette or Escanaba. This can be done more acceptably during the summer months. The plan for the Upper Peninsula session is to concentrate the entire course into two or three days instead of the "one day a week for eight weeks" program, in use in other areas. This is advisable because of the relatively long distances to be traveled.

In the five areas in which conferences are to be held this fall, it is recommended that Mondays, during the eight weeks of their operation, be given to Bay City; Tuesdays to Battle Creek and Kalamazoo; Wednesdays to Flint; Thursdays to Grand Rapids, and Fridays to Traverse City-Cadillac and Manistee.

2. The question was raised regarding the establishment of centers at Jackson and Lansing and Dr. Bruce replied that both these centers had been discussed and had been temporarily set aside in favor of Battle Creek and Kalamazoo for the reasons that the income for this type of work was limited, and Kalamazoo and Battle Creek had the additional advantage of serving a large number of doctors in

the southwest corner of the state. Furthermore, it was felt that both Ann Arbor and Detroit were more readily accessible to Jackson and Lansing. It was the general opinion that Lansing should be considered next when, and if, funds became available for another center. In the meantime the accommodations should be looked into, also the wishes of the local profession consulted.

3. Discussion of the character of the program. The letter of Dr. Anderson, President of the Livingston County Medical Society, was read, which set forth the criticism of some of the men in that county that the material presented was rather elementary. Dr. Bruce pointed out that the program was the result of suggestions contained in some 350 letters. Due consideration was given to sequence and to the avoidance of unnecessary repetition. It was noted, furthermore, that attendance records show that two age groups make up the major portion of physicians in attendance, namely, those graduated less than ten years ago and those graduated more than twenty-five years ago. Those graduated between ten and twenty-five years ago were conspicuously fewer than either of the other two groups. It was also pointed out that these Regional Conferences were not intended to provide training in a specialty. They are planned to cover the problems met with by the general practitioner, and if a general practitioner seeks training along the line of a specialty, it can scarcely be included in courses so necessarily extensive as these.

A specific request has been made in a number of instances for a course in fractures. The treatment of fractures has routinely been included in this extensive course; one of the eight days has been allotted to this subject each year. Intensive training in the treatment of fractures has not been provided during the past three years. Four years ago a course was planned and given at Receiving Hospital in Detroit, which should have been highly acceptable to any one sufficiently interested to cover the entire field. The fact that only six physicians were in attendance at that course seemed to indicate that there was no very considerable demand for it. Such an intensive course in fractures must, moreover, be held at Receiving Hospital in Detroit, because no other institution in Michigan can compare with it in number of cases. No dependence can be placed upon the availability of material for teaching purposes at other institutions throughout the state at a given period.

4. Dr. Corbus felt that some attention should be given to the promotion of attendance. The responsibility for such promotion should be divided between the Councilor and a local committee. Adequate publicity through the bulletins of some county societies will be forthcoming, undoubtedly, but in other areas where county societies do not publish bulletins other steps will be necessary. Circularization of the profession with special communications from the State Secretary's office to some county societies, as well as continued advertising in THE JOURNAL, should substantially increase the attendance.

5. Dr. Cook raised the question of the advisability of utilizing the Postgraduate Conferences for the dissemination of information relative to certain non-clinical aspects of medical practice, such as

- The rehabilitation of unemployables.
- Public health and preventive medicine problems.
- The economic aspects of medical care for the so-called borderline group, etc.

Dr. Bruce, in discussing this point, described the plan evolved at the University in the development of the "Division of the Health Sciences." Organized instruction is given in the program of this agency to medical students, nurses, dentists, public health students and public health nurses, which promotes parallel viewpoints in these parallel professions; each profession involved operates in a field which touches each of the other fields, and through the "Division of Health Sciences" an effort is being made to develop understanding of the relationships among these professions and a unified viewpoint with regard to the various economic and social implications in the practice of each profession.

In the ensuing discussion it appeared to be the sense of the Committee that a noonday luncheon period might well be allocated to the discussion of these subjects related to the practice of medicine. The Committee approved the appointment of Doctors Bruce, Cook, Slemmons and Ekelund to prepare the material to be presented. In each of the five areas, one noon-day luncheon is to be given over to this discussion.

6. Recognition of attendance. The Sub-committee on Postgraduate Medicine for General Practitioners recommended at the 1935 session of the House of Delegates:

"A general practitioner who completes a maximum of eight or a minimum of six days of the postgraduate curriculum would receive an annual Certificate of Attendance. In lieu of the work in the postgraduate curriculum, he might offer other evidence of formal postgraduate training which would entitle him to the certificate.

"Five Certificates of Attendance over a period of eight years would qualify the general practitioner for the Fellowship in Postgraduate Medicine, and twelve Certificates over a period of twenty years, to the 'Honorary Fellowship'."

It is the consensus of this Committee that no certificate of attendance suitable for framing or display should be furnished by the State Society at this time. The advisability of certification after a four-year period of attendance may be considered, subsequently. However, the Committee feels that cognizance must be taken of attendance and at the close of each series of conferences each fall, each member in attendance will receive a letter setting forth his attendance record for the year and asking for correction or corroboration. Whatever program or system of credits is subsequently adopted, should be based upon an evaluation of equivalents to certain courses provided for undergraduates or graduates. Dr. Bruce stated that the records of some three thousand physicians are already on file, and that some of these records go back five and six years. Dr. Davis suggested that if and when certification is made, it should be on the basis, not only of attendance, but on some form of examination.

7. Summary. The Committee concurred in the following:

(a) An eight-day program in five centers, to be held on the day of the week allotted to each center during eight consecutive weeks this fall.

(b) A short session for the western part of the Upper Peninsula, in August and October.

(c) The program for each conference to be submitted to this Committee before adoption.

(d) The socio-economic phases of medical prac-

tice to be presented at one noonday luncheon in each area.

(e) That planned publicity be given to these contemplated Postgraduate activities.

(f) That advice and assistance be given to hospital groups or medical society groups not already covered by this program, in the formulation of Postgraduate activity by and among themselves.

(g) That some form of certification be available upon the completion of the extra-mural four-year program or for equivalent attendance in the Ann Arbor and Detroit centers.

C. T. EKELEND, *Secretary*.

MINUTES OF MEETING OF EXECUTIVE COMMITTEE OF THE COUNCIL

Lansing, April 22, 1936

1. *Roll Call*.—The meeting was called to order by Dr. Henry Cook, Chairman, at 3:05 p. m. in the Olds Hotel, Lansing. Present were Drs. Henry Cook, Flint; A. S. Brunk, Detroit; F. E. Reeder, Flint; T. F. Heavenrich, Port Huron; H. R. Carstens, Detroit; President, Grover C. Penberthy, Detroit; Secretary C. T. Ekelund, Pontiac; Dr. A. M. Campbell, Grand Rapids; Dr. S. W. Insley, Detroit; Dr. Lillian Smith, State Health Department, Lansing; and Executive Secretary Wm. J. Burns. Absent was: Dr. C. E. Boys, Kalamazoo.

2. *Minutes*.—The minutes of the meeting of March 18 were read and approved.

3. *Maternal and Child Health Program in Michigan, Under Social Security Act*.—The minutes of the Public Relations Committee meeting of April 8, 1936, relative to this matter were read, and the subject was analyzed and discussed in detail. Dr. Lillian Smith, representing the State Health Department, presented the following points agreed to by both the Health Department and the MSMS Public Relations Committee:

- I. That before any program is set up in the county its county medical society will be contacted in a meeting of that society.
- II. That the county medical society will immediately appoint an advisory committee of physicians whose advice will at all times be taken into consideration and that no plan will be put into effect of which this advisory committee does not approve.
- III. That the program will include no clinics, treatments, or advice with reference to treatment of any kind—in other words, the program includes coöperation only with the private physician.
- IV. That any over-activity of lay groups as a result of this educational program will be discouraged and curtailed as far as possible according to the advice of the advisory committee of physicians.
- V. That contemplated lectures to lay groups will first be presented in synopsis from to the local county medical society or its advisory committee and that detailed copies will be provided to each member of the society before presentation to lay groups.
- VI. That copies of the whole county plan including these stipulations will be presented to each individual physician when the plan is put into effect in a county.

VII. The plan as presented by the State Department of Health will cover mainly activities in rural areas. It has been approved by the Maternal Health Committee, the Preventive Medicine Committee, and the Public Relations Committee of the Michigan State Medical Society.

Dr. Cook suggested that the outline of prenatal and postnatal care should be sent by the Health Department to physicians; Dr. Smith stated she would like to have her material checked and revised by officers of the Pediatric Section of the MSMS. Dr. Cook also suggested refresher courses in Pediatrics conducted by the county medical society with Drs. Slemons and Smith.

The seven points as outlined above were discussed in detail, and on motion of Drs. Heavenrich-Brunk, the Executive Committee of The Council endorsed the program as outlined in Dr. Smith's letter re maternal and child health work in Michigan under the Social Security Act, and the Executive Committee urged co-operation of the county medical societies in this program. Carried unanimously.

4. *Survey of Obstetrical Practice.*—Dr. Alexander M. Campbell presented the details of survey proposed by the Maternal Health Committee of the MSMS, to be paid for out of U. S. Public Health Service funds. The survey will take three months. Dr. Campbell also presented a proposed educational program to be directed by the Maternal Health Committee including motion pictures and talks before lay women's clubs, the expenses of the movies to be borne by the Maternal and Child Health Division of the State Health Department. Dr. Campbell also presented letter proposed to be sent by his Committee to the president of every county medical society urging the appointment in each county society of a maternal health committee and also co-operation in the survey of the MSMS Maternal Health Committee. Motion of Drs. Heavenrich-Brunk that the Executive Committee of The Council approve the work as outlined by the Maternal Health Committee through its Chairman, and that said committee be authorized to proceed. Carried unanimously.
5. *Practice of Medicine by Osteopaths.*—The Executive Secretary reported on the decision of Judge Vincent M. Brennan in the Wayne County osteopathic case, handed down March 27, 1936, and published in the April 2, 1936, Detroit Legal News. A letter from the Wayne County Medical Society asking for information on the matter of appealing this case to a higher court was read. The Executive Committee discussed this problem and referred it to the Medico-Legal Committee, MSMS, to take up with Attorney Barbour.
6. *Brief on Socialization of Medicine.*—The Brief as approved by the Public Relations Committee and by the Medical Economics Committee was presented. The Executive Committee recommended a change on page 13 under the title "Know All the Facts," to read as follows: "The Michigan State Medical Society is not now and never has been in favor of socialized medicine or compulsory sickness insurance. In 1934, its Committee on Medical Economics presented a mutual health service plan to the House of Delegates as a committee report upon which no action has been taken." This was for the purpose of agreeing with the action taken by the House of Delegates, MSMS, in Flint on

April 12, 1934, and in Battle Creek on September 11, 1934. Motion of Drs. Carstens-Heavenrich that the Executive Committee of The Council authorize the Public Relations Committee to proceed on its recommendation that the Brief be disseminated. Carried unanimously.

7. *Survey of Relief Medicine.*—President Penberthy reported on meeting with the Governor on March 25, 1936, and subsequent events. Dr. Insley, Chairman of the Subcommittee on Relief Medicine, reported on the organization meeting of the Special Commission on Welfare held in Lansing Monday, April 20, 1936: Mr. Smith of Ann Arbor is Chairman; Judge Higbee of Kent County, is Vice Chairman; Professor Dunham of the U. of M. School of Social Science, Detroit, is Secretary; an executive committee of five is to be appointed by Chairman Smith, which group has been empowered to outline the studies which should be made and to employ a study director. General discussion ensued.
Dr. Insley reported progress on his various surveys of costs of relief medicine.
8. *Surety Bonds on Officers.*—Dr. Carstens as Chairman of the Finance Committee recommended increases in the bonds of the Treasurer and Secretary. Motion of Drs. Carstens-Reeder that the bond of the Treasurer of the MSMS be raised to \$35,000. Carried unanimously. Motion of Drs. Brunk-Heavenrich that the bond of the Medical Secretary be increased to \$15,000. Carried unanimously.
9. *Financial Report.*—The financial report for the month, plus list of bills payable were presented by the Executive Secretary. Motion of Drs. Brunk-Heavenrich that the report be approved and that the bills be allowed and ordered paid. Carried unanimously. Report was given that 2,652 members have paid 1936 dues to date compared to 2,012 in 1935.
10. *Duties of Secretaries.*—Dr. Reeder reported on the investigations of his committee relative to the division of the work of the Medical Secretary and of the Executive Secretary.
11. *Medical Economics Committee Appropriation.*—Request for an addition of \$300 to its budget, necessary to complete its surveys of relief medicine was made by the Medical Economics Committee, and was allowed by the Executive Committee of The Council, on motion of Drs. Heavenrich-Carstens. Carried unanimously.
Recess for Dinner, 6:45 p. m. to 8:00 p. m.
At the second session of the Executive Committee of The Council, Dr. John B. Jackson, of Kalamazoo, was present.
12. Dr. Jackson presented the problem of inequitable fees for radiologists giving care to crippled-afflicted children under the two State laws, in Schedules B and D. His letter of March 21, 1936, was read by Chairman Cook. Full discussion ensued. Motion of Drs. Brunk-Heavenrich that the Executive Committee of The Council submit the problem to the Michigan Crippled Children Commission, with the request that the radiologists be recognized and be accorded the same fee schedule (50 per cent of normal fee) as other practitioners of medicine. Carried unanimously.
Dr. J. H. Dempster's letter of March 27, 1936, calling attention to resolutions to be submitted to the A.M.A. House of Delegates by the California Medical Association (published in

February 1936 issue of A.M.A. Bulletin) and urging that the Michigan delegates to the A.M.A. be instructed to favor these resolutions, was read and discussed. This is fundamentally the same problem as Dr. Jackson's complaint: that hospitals and laymen are attempting to fix physicians' fees. The matter was referred to the Michigan delegates to A.M.A.

13. *From Public Relations Committee:*

- (a) The recommendation that the Executive Committee of The Council direct every Councilor of the MSMS to see that the county medical societies in all districts hold regular meetings, in order to permit Councilors and members of the PRC to integrate desired programs in every county medical society, and that the date of the regular and annual meetings of every county society be published in THE JOURNAL each month, was approved by the Executive Committee.
- (b) The recommendation that a committee be appointed to review the classifications of the afflicted child and the crippled child was approved and referred to Secretary Ekelund to act for the Executive Committee of The Council and iron out this problem with the Crippled Children Commission et al.
- (c) PRC Letter No. 2, dated April 23, 1936, was read and approved for mailing to officers of county medical societies, on motion of Drs. Carstens-Heavenrich. Carried unanimously.

14. *News Releases at Annual Meeting.*—(a) The House of Delegates has a standing Press Committee. (b) Publicity on scientific work is to be under the local committee, which in Detroit will be headed by Dr. Wm. J. Stapleton, Jr.

15. *Post Graduate Conferences of the Michigan State Medical Society and the University of Michigan Postgraduate Department.*—Dr. Cook read the minutes of the meeting of the Advisory Committee on Postgraduate Education held in Detroit, March 3, 1936, which were fully discussed. Secretary Ekelund was requested to write the presidents of the Ingham and Jackson County Medical Societies to ascertain whether these societies want postgraduate courses. The question of having economics or social aspects of sickness discussed at these postgraduate conferences was deliberated and by general agreement was ruled out.

16. *Requirements for Medical Students.* Dr. H. A. Luce's resolution relative to certain requirements for students entering medical school, proposed for introduction into the A. M. A. House of Delegates, was approved on motion of Drs. Brunk-Carstens. Carried unanimously.

17. *Delinquent Members.*—The Executive Secretary was instructed to send out a letter in May to every member delinquent in the payment of his 1936 dues advising that his name shall be stricken from the rolls of the MSMS, according to the By-Laws, if his dues are not paid on or before May 16, 1936.

18. *From the Medical Economics Committee:*

- (a) *Admission Policy at U. of M. Hospital.* The question of any changes in the admission policy at the University Hospital relative to private patients, for other than teaching purposes, was presented and discussed. The Executive Committee requested that Dr. J. D. Bruce please advise it of the

latest rulings or status of this admission policy. The Executive Committee requested Dr. Cook to contact Dr. Bruce.

- (b) *Hospital Insurance.* The suggestion of a joint meeting of the Subcommittee on Hospital Insurance (part of the Medical Economics Committee, MSMS) and a similar committee of the Wayne County Medical Society, with Mr. John A. McNamara of the Cleveland Hospital Service Association, was discussed and approved.

- (c) *Rural Medicine.* The matter of Dr. R. G. Leland's request for information on rural medicine in Michigan (and in other states) was referred to the Public Relations Committee.

19. The Executive Committee was of the opinion that its Chairman or some one of its members should be one of the Michigan Delegates to the AMA each year, in order to bring the viewpoint and intimate knowledge of The Council of the MSMS to the AMA House of Delegates. Motion of Drs. Heavenrich-Brunk that the Chairman (Dr. Cook) and the Secretary (Dr. Ekelund) be authorized to go to the AMA in Kansas City in May, 1936. Carried unanimously.

20. *Adjournment.*—The Chair thanked all for their attendance and good advice and adjourned the meeting at 11:25 p. m.

MINUTES OF MEETING OF LEGISLATIVE COMMITTEE

Detroit, April 25, 1936

1. *Roll Call.* The meeting was called to order by Dr. H. H. Cummings, Chairman, in the Wayne County Medical Society Building, Detroit, at 7:15 p. m. Present were Drs. H. H. Cummings, Ann Arbor; F. B. Burke, Detroit; Henry Cook, Flint; L. J. Garipey, Detroit; Carl F. Snapp, Grand Rapids; A. S. Brunk, Detroit; President Grover C. Penberthy, Detroit; Secretary C. T. Ekelund, Pontiac; Dr. James H. Dempster, Detroit; Dr. Carl S. Ratigan, Dearborn; Dr. S. W. Insley, Detroit; and Executive Secretary Wm. J. Burns. Absent: Dr. L. G. Christian, Lansing, (excused), and Dr. H. E. Perry of Newberry.
2. *Minutes.* The minutes of March 17, 1936, were dispensed with.
3. *Relief Medicine.* Dr. Insley gave a report on activities to date of his Subcommittee on Relief Medicine (part of Medical Economics Committee) and what the surveys will show. Dr. Cummings suggested these questions: How many patients are being sent in under medical relief by laymen? How many counties are trying to collect for the services rendered, and what is the percentage of collection? Dr. Insley outlined the organization meeting of the Governor's Special Commission on Welfare. Further suggestions were given to Dr. Insley.
4. *Afflicted-Crippled Persons Laws.* No change has been made in the status of payment of medical and surgical fees under these two state laws. Dr. Cook suggested that Judge Matthews, Chairman of the Legislative Committee of the Michigan Probate Judges Association, should be contacted soon. Dr. Cummings asked Dr. Cook to make this contact.
5. *Practice of Medicine by Osteopaths.* Dr. Burke reported on recent action of Judge Vincent M.

Brennan re Wayne County osteopathic case. Dr. Cook reported on action of the Executive Committee of The Council in referring it to the Medico-Legal Committee to take up with Attorney Barbour.

Mr. Burns gave report on Canadian Survey of four osteopathic schools in the U. S.

6. *Advertising Eye Specialists.* Dr. Burke reported on injunction which the optometrists had obtained against certain optical firms in Wayne who were employing physicians, M.D.
7. *Contraceptive Advice.* Complaint was made that lay women are going from house to house giving this type of advice and selling various devices. The Committee called attention that there is a law against this sort of activity, and recommended that people who were so annoyed have recourse to the Prosecuting Attorney.
8. *Legislative Committee Exhibit.* Dr. Ekelund presented the advantages of a Legislative Committee Exhibit at the Annual Meeting of the Michigan State Medical Society in Detroit next September. The work of this committee could be outlined, the political subdivisions of the state could be graphically displayed, etc., etc. The Chair appointed the following Committee to work on this idea: Drs. Gariepy, Snapp and Ekelund.

Dr. Cummings recommended that the Public Relations Committee might be interested in such an exhibit, as it would be the responsibility of the PRC to assist the Legislative Committee in its fight to protect public health and to keep medical practice on a high plane.

9. *Plans for the Future.* Dr. Cook recommended that each county medical society study the problems in its own area, and compile list of constructive work on economics and legislative activity being done by each county medical society, send it to the State Medical Society so that it could be disseminated to all of the 53 county medical societies to help any backward units in the adoption of a program. A questionnaire should be sent to each county medical society to secure these valuable data, asking questions as to activities along the lines of post-payment plans, arrangements between the society and the poor commissioners to insure relief medicine only to the worthy, compensation problems, method of compensating doctors for care of afflicted adults, the importance of billing the State according to Schedules A, B, C, and D for medical care of afflicted-crippled children, labor board testimony and the question of expert witnesses, etc., etc.

Dr. Ekelund suggested symposium on medical relief by Drs. Paul Kniskern of Kent County, R. R. Piper of Wayne County, L. O. Shantz of Genesee, and R. W. Tuck of Oakland, together with Drs. Cook, Ekelund, Pino, Insley, and Mr. Burns.

10. *Subcommittees' Reports.* The various activities of the subcommittees were discussed and the reports were accepted and approved.
11. *Adjournment* The Chair thanked all for their attendance, helpful suggestions and good advice and adjourned the meeting at 11:20 p. m.

MINUTES OF MEETING OF MENTAL HYGIENE COMMITTEE

Detroit, April 30, 1936

Present: Dr. Grover C. Penberthy, President, Detroit; Dr. M. H. Hoffmann, Detroit; Dr. G. F. Inch, Ypsilanti; Dr. H. A. Luce, Detroit; Dr. Theophile Raphael, Ann Arbor; Mr. George Read, Formerly Judge of Probate, Wayne County; and Dr. C. T. Ekelund, Secretary, Pontiac.

1. Chairman Penberthy opened the meeting at the Statler Hotel and expressed the sentiment of the committee in the loss sustained to medicine in general and this committee in particular in the death of Dr. A. M. Barrett, Chairman.
2. By unanimous consent Dr. Theophile Raphael was made the new Chairman.
3. Dr. Penberthy also announced the appointment of Dr. William H. Marshall, of Flint, to fill the vacancy in the committee.
4. The committee voted to authorize publication of the proceedings of the committee in THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY.
5. Chairman Raphael then called upon Mr. Read to explain the projected program of the Michigan Society for Mental Hygiene. This society is now in process of organization. Preliminary meetings have been held and a board of directors is being chosen. The board of directors is to comprise twenty-seven members, not more than nine of whom may be from Detroit. The following groups will be represented on the board of directors:
 - (a) The medical profession at large, (b) psychiatry as a specialty, (c) social workers engaged in Mental Hygiene, (d) probate judges, (e) school superintendents and educational supervisors, (f) clergy, (g) interested lay people.

The society hopes to be affiliated with the National Committee on Mental Hygiene. From this board of directors will be chosen an Executive Committee of from six to nine, and in addition there will be a Professional Advisory Committee of medical men, including psychiatrists and psychologists. The officers will be President, a full-time Executive Secretary, and a Medical Director.

Judge Read, who has had twenty-five years' experience in the field of mental hygiene, is one of the prime movers in this organization and he stated that he had been distressed again and again over the quality and quantity of mental hygiene facilities and service available to the people of Michigan, especially in the knowledge that there is no place for patients to go after commitment, and that in general custodial care alone is provided. By comparison with eastern states, notably New Jersey, New York and Massachusetts, Michigan lags far behind in the physical equipment established for the care of the mentally sick, as well as in quantity of trained personnel provided for their care. Even in existing hospitals where the physical equipment is good and the quality of personnel is excellent, the numbers of this personnel are entirely inadequate.

There are approximately 275 beds per 100,000 of population available for the care of the mentally sick in Michigan, including Eloise Hospital, whereas, in many eastern states this figure approaches 460 beds. Again in the matter of professional personnel, New York has one for

every 150 beds, whereas, in Michigan there is only one to 400 beds. In the matter of nurses, in New York one nurse to each 7 or 8 beds is the rule, whereas, in Michigan, there is less than one nurse to 9 beds.

Perhaps most distressing of all is the attitude of hopelessness which the general public and the medical profession at large hold with regard to the mentally ill. This is in sharp contrast in Michigan and most western states, with the point of view in more enlightened eastern communities.

The problem then is two-fold:

1st: The enactment of legislation to provide the requisite physical facilities and quantity of professional talent.

2nd: An educational program among the medical profession at large and among the laity to induce a more active interest in mental hygiene to overcome the attitude of hopelessness and the stigma that now attaches to the mentally ill, and to equip practitioners of medicine with knowledge concerning the proper management of these cases. Mental illness ranges from the neuroses through a wide variety of types of mental illness and it has been estimated that from 25 to 75 per cent of the average physician's practice is with patients requiring mental hygiene.

In general discussion which ensued it was pointed out that possibly 5 per cent of the beds in existing State Hospitals could be emptied if qualified medical talent were available to whom the patient could be referred in his own community. It was noted also that for the medical profession there is a socio-economic aspect of this problem in that unless the profession at large interests itself in mental hygiene the state must perforce discharge this obligation through salaried physicians. However, in any event, it will probably be necessary to expand the clinic program greatly in order to

(1) Conduct follow-up studies of paroled patients.

(2) Provide adequate consultation service, especially with regard to problem cases in schools and in conjunction with Probate Courts for juvenile delinquents, psychopaths and others. Judge Read pointed out that in contacting and organizing the laity immediate stress would be on the legislative program to provide more and better physical equipment and personnel, and it is hoped to interest Probate Judges throughout the state to become active in the promotion of the proposed legislative program. But that out of this interest on the part of the laity would come an educational program to promote more interest in and understanding of the problems of mental hygiene. Funds for this organization are expected to be forthcoming from private sources, at the outset at least.

This committee has a special interest and responsibility in

I. Functioning in an advisory capacity.

II. Urging necessary increases in the professional staffs of State Hospitals.

III. In the promotion of educational and demonstration clinics among the profession at large. This to be accomplished through

(a) Special mental hygiene programs in councilor districts conducted by qualified psychiatrists and psychologists.

(b) Inclusion in formal postgraduate medical education programs of this same type of instruction.

IV. Urging normal schools to give instruction in mental hygiene.

V. Urging adequate attention to psychiatry and mental hygiene in the training of interns. The present attitude is deplorable in that the average hospital turns the patient out, once organic pathology has been ruled out.

It was held essential that whatever talks were to be given before professional groups shall be clearly and completely outlined by this committee to the end that information conveyed may be of practical usefulness to the individual practitioner. It should be continuously borne in mind that the average clinician has little interest in, or knowledge of, mental hygiene and its proper conduct. It should not be difficult at all to stimulate interest, providing the material is organized and presented so as to be maximally useful in practice.

The committee is also asked to collaborate with the Joint Committee on Health Education in providing qualified speakers to lay groups. Collectively the members of the committee were able to furnish the Chairman, Dr. Raphael, with such a list.

It was moved by Luce-Inch that this committee formulate a program covering its interpretation of the functions and purposes of this committee and outline a suggested plan of work to be submitted to the Executive Committee of The Council of the Michigan State Medical Society, and subsequently presented to the proposed Michigan Society for Mental Hygiene. Carried unanimously.

6. The committee concurred in the Secretary's suggestion that a scientific exhibit be arranged for the presentation at the annual session of the Michigan State Medical Society to be held in Detroit September 21 to 24. Dr. Hoffmann and Mr. Read were asked to collaborate in the preparation of this material.
7. The Chairman on behalf of the committee expressed thanks to the Michigan State Medical Society for its hospitality and thanked the members for their attendance.

MINUTES OF MEETING OF PUBLIC RELATIONS COMMITTEE WITH THE FILTER BOARD OF WAYNE COUNTY AND THE PROBATE JUDGE

Detroit, May 7, 1936

1. *Roll Call.*—The meeting was called to order by Dr. L. Fernald Foster, Chairman, at 8:30 p. m. Present were Drs. L. Fernald Foster, Bay City; F. B. Miner, Flint; E. I. Carr, Lansing; Roy H. Holmes, Muskegon; A. V. Wenger, Grand Rapids; A. H. Whittaker, Detroit; H. E. Perry, Newberry; Ralph H. Pino, Detroit; L. O. Geib, Detroit. Also present were Judge D. J. Healy, Jr., Detroit; Dr. F. B. Burke, Dr. G. L. McLellan, Dr. W. P. Woodworth, Dr. L. T. Henderson, Dr. Mark McQuiggan, Dr. W. C. C. Cole, all of Detroit; Dr. L. O. Shantz, Flint; Mr. Theodore J. Werle of the Michigan Tuberculosis Association, Lansing; Mr. J. A. Bechtel, Detroit; and Executive Secretary Wm. J. Burns. Absent were Drs. F. T. Andrews and J. J. Walch.
2. *Minutes.*—The reading of the minutes of April 8, 1936, as sent to each member of this committee, were approved.
3. *Afflicted-Crippled Child Problem.*—The filter system in the State of Michigan was discussed by Chairman Foster, who called upon Drs. Henderson, McLellan, Woodworth, and on Judge Healy of the Juvenile Division of the Probate

Court of Wayne County, to discuss same. The load in Wayne County is very large; 5,000 children and about 7,000 adults per year. The five physicians on the filter committee for the afflicted child are overworked. A weak link is the method of admission: there should be an affidavit form, uniform throughout the state. Judge Healy stated he wished to work with the medical profession in every way, remarking: "We want the best for the profession and for the public." Motion of Drs. Carr-Miner that the Public Relations Committee adopt the recommendation of the Wayne County Filter Board that application blanks furnished by the Auditor General's office for afflicted-crippled children be made in the form of an affidavit as to the truth of statements therein formulated. Carried unanimously.

4. *Cadillac Letter*.—A letter from Cadillac, Michigan, was read in which it was stated that an afflicted child case which had been turned down by the Economic and Medical Filters of Wexford County was given tax-supported medical care on orders of someone in the office of the Attorney General. General discussion. Motion of Drs. Wenger-Carr that the Public Relations Committee recommend to the Executive Committee of The Council that the Executive Secretary and the Public Relations Committee Chairman investigate this case and present the facts to Governor Fitzgerald, who requested that he be kept informed of any abuse of the filter system. Carried unanimously.
5. *Unity in the Profession*. The matter of unity in the profession was discussed by all present, resulting in a motion by Drs. Holmes-Miner that in matters of policy the allegiance of the filter system be first to the county medical society and second to other organizations and groups. Carried unanimously.
6. *Brief on Socialization of Medicine*.—The Executive Committee of The Council authorized the PRC to proceed on its recommendation that the Brief be disseminated. Motion of Drs. Miner-Carr that the PRC refer the Brief to the printer, and that the name of the "Public Relations Committee, Michigan State Medical Society" be placed on the cover. Carried unanimously.
7. *Manistee Meeting*.—The suggestion from the Secretary of the Manistee County Medical Society that the PRC invite counties close to Manistee to a joint meeting with county public officials to hear Dr. L. Fernald Foster on May 14, 1936, was approved on motion of Drs. Carr-Holmes. The Executive Secretary was instructed to send the invitations.
8. *County Health Units*.—The suggestion from a county medical society that the PRC draft a list of regulations or conditions precedent which county societies might present to proper authorities before they approve the installation of county health units was presented. Motion of Drs. Carr-Miner that this committee publicize the operation or administration of county health units in the next PRC Letter along the lines recommended by Dr. L. O. Geib, was carried unanimously. The recommendations follow:

A. The Committee strongly favors the establishment of whole-time county health departments. Where population is sparse, district health departments would be organized to cover two or more counties. Such health de-

partments should employ a full-time health officer and adequately trained personnel, including one or more public health nurses.

(a) In order to obtain the establishment of a county health unit, the Committee advocates the active participation into a campaign to educate the public in the advantages of such a unit; i. e., economy of operation and a better and more complete service.

1. Through coöperation with other interested groups.
2. Through newspaper stories.
3. Through a Speakers' Bureau (to contact Lions, Kiwanis, Parent-Teacher Associations, etc.)
4. Contacts with public officials.

B. The Committee believes that there are many preventive medical procedures which can be more efficiently and effectively carried on through the coöperation of qualified and properly prepared practicing physicians, coöperating physicians rendering services in *their own offices*. Every practicing physician should become in fact a practitioner in preventive as well as curative medicine.

C. That portion of the program for the protection of young children against smallpox and diphtheria has been found an excellent means of stimulating the interest of the practicing physician and has served as a stepping stone in a program involving general medical participation in public health service.

D. The Committee feels that the two prime essentials are, first, an alert and interested local medical profession and, second, a full-time local health department the function of which shall be purely administrative and educational, and *not actively engaged in practice of medicine*.

E. It has been found in Detroit and elsewhere that the usual publicity methods employed in health education will not suffice to procure the protection of the majority of pre-school children against diphtheria. There is required a personal contact between a health educator and the parent. The public health nurse with house to house visitation is the most effective contact agent. Therefore, every county health department should have a sufficient number of public health nurses to carry on this type of educational work.

F. The Committee feels that it is just and proper that the physician should be reimbursed from the public funds for services rendered to indigents and there should, if possible, be set aside in each county an appropriation with which to pay the physician a small honorarium for services to individuals unable to pay. The Committee feels, however, that failure to secure such an appropriation should not militate against the plan since it is to the interest of the individual, the community and the physician to bring about such a program of medical participation.

G. Committee feels that for the time being the work in Michigan should be carried on preferably in areas with full-time and adequate local health service.

H. There should be organized in each county medical society, a local committee to work with the health officer, and other public officials.

J. It is recommended that each such area select its committee in September and that a meeting be arranged with such committee members and the Preventive Medicine Committee of the State Medical Society to be held not later than November.

9. *Tuberculosis Division in State Health Department.*—This matter was discussed by Dr. Geib and Mr. Werle and the members generally. Dr. Geib stated that \$4,500,000.00 is being spent annually by Michigan on tuberculosis, and that the Michigan laws be revised. What program the Michigan State Health Department contemplates is not known. Motion of Drs. Holmes-Carr that the PRC arrange a joint meeting between the Preventive Medicine Committee and the PRC, providing Dr. C. C. Slemmons can be present, to determine the tuberculosis situation and to make recommendations. Dr. E. J. O'Brien of Detroit, Mr. Theodore J. Werle of Lansing and Commissioner of Health Henry F. Vaughan, Detroit, are to be invited. Motion carried unanimously.

10. *Fees in Industrial Cases.*—A letter from Dr. J. S. DeTar of Milan, Michigan, asking for a fee schedule in industrial cases was presented. No state-wide fee schedule has been established, according to the President of the Michigan Industrial Surgeons Association, and it is not likely that such a fee schedule will ever be fixed. However, Bay County and Muskegon County have arranged tentative fee schedules. Dr. DeTar was to be advised of this.

11. *Social Security Act.*—The Executive Secretary reported that \$100,000.00 had been earmarked by the State of Michigan for the care of the crippled child for one year beginning July 1, 1936, in order to qualify for a like sum from Social Security funds.

12. *Adjournment.*—The Chair thanked Judge Healy for his kindness in attending this meeting; he expressed gratitude to the Wayne County Filter Committee for its advice and attendance, and thanked the members of his Committee for their presence and help. Dr. McClellan, speaking for the Wayne County Filter Board, thanked the PRC for giving its time and advice to the filter problem. The meeting was adjourned at 11:30 p. m.

Passive Vascular Exercise

Wilson and Roome, (*Journal A. M. A.*), employed passive vascular exercise in the treatment of twenty-three cases of peripheral vascular disease. Twelve cases were diagnosed arteriosclerosis; five of these were subjectively somewhat improved but there was little or no permanent change in the objective manifestations. One patient's complaints were relieved and the appearance of the foot definitely improved, although the fact that this patient was given only eighteen and one-half hours of treatment makes it doubtful whether the passive vascular exercise was responsible for the result. Six cases showed no change. There were eight cases of thromboangiitis obliterans; of these, two showed a slight decrease in the intermittent claudication and six showed no change. Many of these patients felt improved during the course of the treatment but reported no permanent beneficial results when questioned two or more months later.

COUNTY SOCIETIES

EATON COUNTY

The postponed April meeting of the Eaton County Medical Society was held at Charlotte on Thursday, May 7, 1936. After the dinner, the meeting was at once turned over to the clinical program and Dr. H. A. Meyer introduced the guest speaker, Dr. Robert Novy of Detroit. Dr. Novy talked about degenerative heart disease and particularly emphasized the importance of an early and accurate diagnosis of coronary artery disease and its differentiation from the clinical entities with which it is most commonly confused. Dr. Novy's method of picturing progressive cardiac degeneration as being a relentless inevitable aging process beginning at a very early age, was unusually clear and particularly enlightening. Many questions were asked Dr. Novy at the close of his discussion and he was tendered an enthusiastic vote of thanks for his excellent paper.

Dr. D. V. Hargrave read a short paper entitled "Signs of Death," which to some extent complemented the remarks of Dr. L. M. Snyder of Lansing, who in April had addressed this society on the subject, "Medicine in Crime Detection."

After a short business meeting during which Dr. J. W. Davis of Charlotte resigned as Treasurer of the society and Dr. L. G. Sevensen of Charlotte was elected to fill that post, the meeting was adjourned.

THOMAS WILENSKY, M.D., *Secretary*

GENESEE COUNTY

The regular meeting of the Genesee County Medical Society was held at Hurley Hospital, Wednesday, April 1, 1936.

The meeting was called to order by the president, Dr. R. D. Scott. Minutes of the last meeting were read and approved.

Dr. Rundles made an announcement concerning fast driving on the street by members of the medical profession. He stated that the Police Department had asked to announce the fact that they wished to be lenient and tolerant when fast driving was necessary, and that doctors should be asked to not abuse the traffic rules.

Dr. Probert, as chairman of the Preventive Medicine Committee, presented a new plan whereby all children would be immunized against diphtheria and smallpox by private physicians before they reach one year of age. This was discussed in detail, after which it was moved by Dr. Moore that the report be accepted. Seconded and passed. A copy of this report to be filed with the minutes of this meeting and also published elsewhere in *The Bulletin*.

Dr. Goering reported for the committee on the minimum fee schedule with the presentation of a tentative list of fees. After minor corrections it was moved and supported that it be accepted by the Society. It was moved by Dr. Curry that this fee schedule should be printed in book form with an explanatory paragraph stating that this is a minimum fee, and should be for the personal information of Society members only. Seconded and passed.

Meeting adjourned.

C. W. COLWELL, M.D., *Secretary*.

JACKSON COUNTY

The April meeting was called to order by the president, Dr. Chas. R. Dengler. The minutes of the preceding meeting as published in *The Bulletin* were approved. Dr. Kudner invited the members to attend the meeting of the Michigan Industrial Physicians and Surgeons Association on Wednesday, May 6, at the Hotel Hayes. Dr. Glover took a bow on his appointment to the committee which is to be known as Friends of the Library. The members were urged to notify the secretary at once in the case of illness or death in the family of any doctor.

The question of having a stag party in June was opened for general discussion and it was unanimously voted to have a real old-time stag party with the details left to the committee. This committee is to consist of E. H. Corley, chairman, R. J. Hanna, Don F. Kudner, John Van Schoick and Phil Riley.

It was explained that the plans for doing immunization had been completely upset by the recent election and change in the personnel of the committee of the supervisors through which these arrangements had to be made. The members were urged to send in their bills on Crippled Children work even though they might not get paid for the work because the state committee did not believe that the veto of the Governor would stand very long and not only that but the state committee needed the bills to help to estimate the budget.

Highway First Aid Stations Unnecessary

A letter from the Owosso headquarters of the American Red Cross asking for an opinion on their Highway Safety Program was read and it was moved, seconded and carried that this society did not approve of the establishment of first-aid stations which were to be manned by lay persons supplied by the Red Cross. There was no place in the county where such a station was deemed necessary.

Dr. Riley discussed a number of matters pertaining to the business of Academy of Medicine and Dentistry. In the first place the fee schedule known as Schedule A is now on file in the office of the secretary, where it may be studied by those interested. There is also supposed to be a copy in each hospital. He next stated that they had established a filter committee in each of the hospitals under the supervision of Dr. Cooley at Mercy and Dr. Alter at Foote. These committees are to be of the rotating type and their primary purpose is to cut down the number of days that patients are kept in the hospitals. These committees will meet twice a week. It was moved by Dr. Alter and seconded by Dr. O'Meara that the county medical society endorse the hospital filter system as proposed by the academy.

Active Auxiliary

Dr. Dengler announced that the auxiliary to this society was sponsoring a lecture on cancer in the high school auditorium at 8:15 p. m., Tuesday, April 28. The lecture is free. The speaker will be Dr. F. L. Rector, field representative for the American Society for the Control of Cancer, who will speak on "Facts and Fallacies Concerning Cancer." Dr. O'Meara passed out complimentary tickets to the members, who were asked to distribute them to the patients who might be interested. The president announced that the telephone committee would call every doctor on Monday next to remind them of the meeting. He urged that this first major project of the ladies be supported 100 per cent.

It was reported that the economic filter of the county was not working as it should and that there were still patients coming direct to the medical filter from the office of the probate judge without having a slip from their doctor.

The members were reminded that the original o. k. on a hospital patient must be renewed by Mr. Scarborough every ten days and that bill for operation must state what the operation was.

Dr. J. M. Robb Speaks

The meeting was then turned over to Dr. McGarvey, chairman of the evening, who introduced the speaker, Dr. J. Milton Robb, head of the eye, ear, nose and throat department of Harper Hospital, Detroit. Dr. Robb gave a very complete dissertation on "Headaches" which was illustrated with slides and charts. In his introductory remarks he stated that backache and headache are the two most common complaints that send patients to the different culms mainly because the regular physicians do not go into the history of the case deeply enough. If a tonsillectomy or appendectomy does not relieve the patient the general practitioner is prone to give up and the patient either resorts to aspirin or a cultist. He quoted Dr. Angus McLean as saying that pain and pride bring the patient to the doctor, for relief of the pain and because a friend or relative has remarked that the patient does not look as well as usual.

He classified headaches generally into those you can forget, those you cannot forget and those that make you forget everything! The scientific classification was also given by Dr. Robb.

In the general discussion of the common causes of pain in the head, these causes were listed in their order of frequency as follows: (1) Sinus disease, (2) migraine, (3) brain tumor, (4) brain abscess, (5) eye disease—anterior segment, (6) meningitis, (7) encephalitis, (8) vascular accidents, (9) trauma, (10) subdural hematoma, (11) exogenous toxemia, (12) dental caries, (13) lues, (14) sun stroke.

Many questions were asked and answered and the meeting was then adjourned.

H. W. PORTER, M.D., *Secretary*.

NORTHERN MICHIGAN

(Antrim, Charlevoix, Emmet, Cheboygan Counties)

The regular meeting of the Northern Michigan Medical Society was held at the Perry Hotel, Petoskey, April 9. The meeting was called to order by President Engle. Minutes of the last meeting were read and approved. Correspondence was read. The meeting was then turned over to Dr. Mayne of the program committee, who introduced Dr. M. Osterling of the Children's Clinic of Traverse City, who spoke on the function of the clinic and its relation to the general practitioner. A round table discussion and questions followed. Dr. Conway was appointed to the Program Committee.

The May meeting of the Society was held at the Perry Hotel, May 14. In the absence of both the president and vice president the chair was held by the secretary. Minutes of the last meeting were read and approved. Correspondence was read.

Motion was made and supported that the Board of Supervisors of Emmet County be informed that as we think an emergency is over we revert to the original fee schedule for hospitalization of indigents beginning July 1, 1936. Motion was carried.

There being no further business the meeting was turned over to Dr. Dean, who introduced the speaker, Dr. Lillian Smith of the State Department of Health, who gave a report on the Maternal and Health Program in Michigan under the Social Security Act. Discussion followed.

Motion was made and supported that our society approve of the program as given. Motion was carried.

ERVIN J. BRENNER, M.D., *Secretary*.

JOUR. M.S.M.S.

OAKLAND COUNTY

Stacey Skelton: Through the past two years, the liaison committee of the county society with the ERA has met frequently with the medical administrator, and not infrequently with the No. 1 man, Stacey Skelton. At all times, you may be sure, Mr. Skelton has exhibited an intensely informed attitude in regard to medical matters. He has said, at no less than the last meeting, that he would, not for a minute, consider any plan in which the present set-up of medical relief were not a vital part. With such a sympathetic friend at court, it behooves us, then, to listen with open mind and an equally sympathetic attitude to any information which Mr. Skelton might have to offer us in regard to welfare medical activities. In the near future, Mr. Skelton may have several modifications of procedure to propose to us. When, and if, such modifications are offered, we urge that you, the active participants of the present set-up, carefully consider them before making any hasty decision. Remember, if you will, that with Mr. Skelton's very active coöperation, Oakland County is able to boast of as advanced a system of medical relief as exists in the country today. That we, as practicing physicians, have been particularly free of any lay pressure as far as the methods and means of practice are concerned. You may take the word of the entire committee for the fact that, should modification become necessary, it is only because, by retreating a foot, we may save a yard, of the advantage we have gained in the past two years.—E. W. B. in *The Bulletin of the Oakland County Medical Society*.

ST. CLAIR COUNTY

A regular meeting of Saint Clair County Medical Society was held Tuesday, May 5, 1936, at the Harrington Hotel, Port Huron. Twenty-one members and seven guests were present. President J. H. Burley presided.

Dr. Lillian R. Smith, Director of the Bureau of Child Hygiene and Public Health Nursing of the Michigan Department of Health, outlined the proposed plan of organizing Saint Clair County for Maternal and Child Health work under the Social Security Act. Dr. Smith went into detail to explain just what would be the relation between the public, the state nurses and the family physician. Dr. L. Fernald Foster, Bay City, chairman of the Public Relations Committee of the State Society, read and explained the several provisions made by his committee and agreed to by the Department of Health before the plan was approved. Questions were put to Dr. Smith by four members of the County Society and a few remarks were made by Dr. Henry Cook, Flint, chairman of the Executive Committee of the Council of the State Society.

After a short business session Dr. Cook spoke on "Group and Individual Activity of the Medical Profession." Dr. Foster spoke on the "Leadership of the Medical Profession in the working of the Social Security Act," concerning the organization of the full time County Health Unit, the organization of a Speakers' Bureau and upon other activities of the County Medical Society. He congratulated Saint Clair County Society because of the activity of its officers and various committees, its well organized filter and the coöperation with the Probate Judge in caring for medical indigents. Dr. C. L. Borden of Yale was elected to active membership.

* * *

A regular meeting of this society was held at Saint Clair Inn, Saint Clair, Michigan, Tuesday, May 19, 1936.

Twenty-five members and guests were present. Dr. J. H. Burley presided.

During the dinner the president called upon al-

most everyone present for remarks and a fine spirit of good fellowship prevailed.

A resolution was adopted to amend Article V of the Constitution of the Society and Section 3, Chapter 3 of the By-Laws. These changes related to the election of a president-elect each year instead of a vice president, the president-elect to succeed to the presidency of the Society the following year. A motion was adopted to make these changes retroactive so as to apply to the present officers of the Society; thus Dr. Howard O. Brush will serve as president during the year of 1937. A discussion of the use of certain advertising matter loaned by Parke, Davis & Co., to the osteopaths, took place. Dr. Theo. F. Heavenrich, Councillor of the Seventh District of the State Medical Society, made a few remarks and also discussed the coming decision of the State Supreme Court anent osteopaths doing surgery and pointed out that the profession had nothing to lose in obtaining a decision on this point.

Dr. Leader, an associate of Dr. Angus McLean, of Detroit, spoke on toxic goiter, and Dr. Leckie on the practical value of intravenous urography. Both talks were very well presented and much enjoyed by those present. A rising vote of thanks was extended the speakers.

Meeting adjourned.

GEORGE M. KESL, *Secretary-Treasurer*.

WASHTENAW COUNTY

A regular meeting of the Washtenaw County Medical Society was held at the Michigan Union on Tuesday, April 14. Dinner was served at 6 P. M. Eighty-eight members attended the scientific program which followed the dinner.

The minutes of the meeting of March 10 were approved as printed on the program.

Dr. Miller, president, appointed the following doctors to serve on the Medical Filter Board:

Washtenaw County Medical Filter Board
Terms of Office—Dates inclusive

April 1—April 15	.....F. L. Arner, Ann Arbor
April 1—May 1	.....B. M. Harris, Ypsilanti
April 1—May 15	.....D. E. Lichty, Ann Arbor
April 15—June 1	.....Andros Gulde, Chelsea
May 1—June 15	.....P. H. Bassow, Ann Arbor
May 15—July 1	.....W. J. Wright, Ypsilanti
June 1—July 15	.....M. L. Hannum, Milan
June 15—August 1	.....G. T. Clements, Ann Arbor
July 1—August 15	.....F. B. Williamson, Ypsilanti
July 15—September 1	.....G. T. Prout, Saline
August 1—September 15	.....J. H. Failing, Ann Arbor
August 15—October 1	.....W. C. Wylie, Dexter
August 29—October 10	.....Marianna Smalley, Ann Arbor
September 12—October 24	.....Conrad Georg, Ann Arbor
September 26—Nov. 7	.....Chas. Woodbridge, Saline
October 10—November 21	.....Chas. Holland, Ann Arbor

Dr. Miller appointed the following Committees on Resolutions:

Concerning the late Dr. H. W. Schmidt: Dr. Andros Gulde, Chairman; Dr. John Wessinger, Dr. A. A. Palmer.
Concerning the late Dr. A. M. Barrett: Dr. C. D. Camp, Chairman; Dr. Theophile Klingman, Dr. George Inch.

The following qualified physicians were elected to membership upon recommendation of the Board of Censors:

Burton F. Barney, Department of Dermatology, University Hospital.

Russell Malcolm, Department of Surgery, University Hospital.

John M. Sheldon, Department of Internal Medicine, University Hospital.

A symposium on various aspects of the common communicable diseases was presented.

Dr. Norman Lichty: "Diagnosis of Common Communicable Diseases."

Dr. John Law: "The Prophylaxis against Communicable Diseases."

Dr. David M. Cowie: "The Treatment of Some of the Common Communicable Diseases."

Dr. John Wessinger discussed the papers.

The meeting adjourned at 8 P. M.

JOHN V. FOPEANO, M.D., *Secretary*

WOMAN'S AUXILIARY

MRS. A. M. GIDDINGS, President, 22 Riverview Ave., Battle Creek

MRS. KENNETH LOWE, Secretary-Treasurer, 107 Elizabeth St., Battle Creek

MRS. L. C. HARVIE, Press Chairman, 341 Brockway Place, Saginaw

WAYNE COUNTY

Dr. T. K. Gruber of Eloise, Michigan, assumed the presidency of the Wayne County Medical Society at the annual meeting of May 18, 1936. Dr. Fred B. Burke was chosen as president-elect; Dr. C. E. Umphrey was elected secretary; the retiring president, Dr. R. C. Jamieson, was made a member of the Board of Trustees for a five-year term. Dr. P. L. Ledwidge was elected chairman and Dr. D. I. Sugar was chosen as secretary of the Medical Section. Dr. Walter L. Hackett and Dr. C. C. McCormick were elected chairman and secretary, respectively, of the Surgical Section. Delegates and alternates to the Michigan State Medical Society House of Delegates were also elected (list appears elsewhere in this issue of THE JOURNAL).

The annual meeting was preceded by a dinner in honor of Dr. Raymond B. Allen, newly appointed Dean of the Wayne University College of Medicine, at which 150 physicians were present. Dean Allen spoke at the annual meeting on "Trends in Medical Education."

The meeting was followed by a social session or "afterglow" in honor of the new president, Dr. Gruber.

Lobar Collapse in Children

Gladys L. Boyd, Toronto (*Journal A. M. A.*, Dec. 7, 1935), states that the actual occurrence of lobar collapse is so restricted to the atelectasis of a lower lobe, characterized radiologically by a basilar triangular shadow, that its discussion is practically limited to the study of the latter condition. A basilar triangular shadow may be described as a homogeneous opaque shadow in the form of a right angled triangle having for its base the diaphragm, one side of the mediastinum, and a hypotenuse formed by a line extending from the hilus to some point on the diaphragm. The latter may be straight, convex, concave or slightly irregular in its outline. Importance is attached to its character as varying with the underlying cause. These opaque areas until quite recently have been attributed to mediastinal pleurisy, seldom proved, and to fibrosis of the lung. The author has seen basilar triangular shadows in roentgenograms of the lungs of fourteen children. Twelve of these were definitely associated with bronchiectasis. This represents a morbidity of only about 7 per cent of the cases of bronchiectasis studied in the period of observation. In all cases, as far as could be determined, such shadows were produced by collapsed lower lobes of the lung. There was no evidence to support Kerley's contention that such collapse usually occurs in an accessory lobe of the lung. Every case was examined bronchoscopically, and pathologic changes of the bronchial mucosa were apparent. The essential lesion is probably in the smaller bronchioles, which become occluded by secretion with resulting collapse. Dilatation is produced readily in the weakened bronchi by increased intrabronchial pressure. Whether such dilatations are compensatory, as Findlay suggests, is not certain. It may be that these cases are more commonly associated with a lobar type of pneumonia than are those without lobar collapse.

Calhoun County.—One of the most outstanding events during the year for the Calhoun County Medical Auxiliary was the benefit bridge party Tuesday evening, April 28, at the Werstein Memorial Nurses' Home, of the Leila Hospital. One hundred fifty members and friends attended. While the guests were assembling, several young men from the local high school contributed piano and clarinet numbers.

Many prizes, which had been donated by local merchants, were awarded not only for high scores in the card games, but also for various outstanding traits of those present, such as, the handsomest man, eater, the most prominent Democrat (voted so by a party of Republicans), etc.; this feature of the evening adding much hilarity and spontaneity to the occasion. These prizes were presented to the guests by the attractive young daughters of the members. The girls were dressed in colorful formals.

At the close of the games, refreshments were served from a beautifully decorated table covered with an embroidered cloth and centered with spring flowers and yellow tapers in silver candelabra. Mrs. A. M. Giddings, president of the State Auxiliary, and Mrs. Wm. Dugan, president of the Calhoun County group, presided at the coffee urns.

An efficient committee on arrangements was headed by Mrs. B. D. Sleight, and Mrs. C. W. Brainard and Mrs. Wilfred Haughey had charge of refreshments.

The evening as a whole proved both financially and socially a huge success.

MRS. L. M. UPSON, *Press Chairman*.

Kalamazoo County.—Telling of her experiences in Gloucester and Portsmouth, where she spends her summers, Miss Nina Ward, art teacher at Central High School, spoke before members of the Women's Auxiliary, Academy of Medicine, Tuesday evening, April 21, at the home of Mrs. Ralph B. Fast, Low Road. Covers were laid for 26 at dinner, and decorations were carried out with lavender sweet peas. During her talk Miss Ward showed many pictures taken in Gloucester and Portsmouth.

During the short business session the following nominating committee was named by the president, Mrs. C. L. Bennet: Mrs. W. E. Shackleton, Mrs. Homer Stryker and Mrs. F. M. Doyle.

MRS. F. M. DOYLE, *Press Chairman*.

Saginaw County.—The annual meeting of the Saginaw County Auxiliary was held Tuesday evening, April 21, at the Town Talk Tea Room with about 30 members in attendance. Annual reports were given and the following officers were elected: President, Mrs. A. E. Leitch; Vice President, Mrs. F. J. Cady; Secretary, Mrs. Frank A. Poole; Treasurer, Mrs. H. M. Bishop.

"Devils, Drugs and Doctors" was most interestingly reviewed by Mrs. C. R. Murray. House prizes were drawn by Mrs. Murray and Mrs. J. A. McLandress.

Refreshments were served late in the evening.

MRS. L. C. HARVIE, *Press Chairman*.

Wayne County.—The April meeting of the Woman's Auxiliary to the Wayne County Medical Society was the third and last of the Public Relations meetings held this year at the Statler under the direction of Mrs. Frederick T. Munson and Mrs. Hugo Freund, chairmen. Open to the public without charge, this illustrated lecture on "Controlling Tuberculosis" was given by Dr. Jay Arthur Myers, Professor of Preventive Medicine at the University of Minnesota. Dr. Howard Peirce presented Dr. Bruce Douglas, Controller for Tuberculosis at Herman Kiefer Hospital, who introduced Dr. Myers. A brief business session with Mrs. James H. Dempster, vice president of the Auxiliary, presiding, followed the address. A subscription luncheon honoring the speakers preceded the meeting.

Among the members of our organization is Mrs. B. Hjalmar Larsson, who won a coveted distinction among twenty-four entrants in competition for the Barbour Memorial Fountain on Belle Isle. Three nationally known art authorities awarded her model second prize and the entry was given a conspicuous place in the recent Art Exhibit.

Mrs. Claire Straith, membership chairman, has announced the addition of sixty-one new members to the auxiliary.

The Ways and Means Committee recently sponsored a tour of the Artisan Guild during which Paul McPharlin talked on "Marionettes," and other craftsmen demonstrated their work. Mrs. H. Walter Reed was in charge of arrangements.

* * *

The annual meeting occurred Friday, May 8, and reports by the various committees showed a year of creditable accomplishment. Verbal as well as material tribute was paid to the tireless efforts of the retiring president, Mrs. Frank W. Hartman, who in turn bestowed upon each member of the Executive Board a substantial reminder of her commendation. After the business session, Dr. Roger Siddall, president of the Detroit Obstetrical and Gynecological Society, discussed the movie, "Fertilization of the Human Female," as it was shown. A social hour with tea concluded the meeting.

Following is the list of officers for the ensuing year: Mrs. Roger V. Walker, President; Mrs. Leduc O. Geib, First Vice-President; Mrs. Audrey O. Brown, Second Vice President; Mrs. Clifford Lowranger, Third Vice President; Mrs. Gerald Wilson, Corresponding Secretary; Mrs. William G. Mackersie, Recording Secretary; Mrs. Elden C. Baumgarten, Financial Secretary; Mrs. Charles E. Dutchess, Treasurer; Mrs. Thomas K. Gruber, Custodian.

The year's activities closed with two events, the annual "Bring Your Husband" dinner at the Wardell, May 23, and May 25 the grand finale of the bridge groups and guests at Ingleside Club. The retiring Press Chairman deeply appreciates the many courtesies of the JOURNAL'S Editor, Dr. Dempster.

(MRS. MILTON A.) WINOGENE E. DARLING,
Press Chairman.

"By appointed hours we enter into life, our days are numbered which made us ripe to see the light, but of the duration of our life there is no law; the weakest thread will sometimes spin itself to unexpected length while the strongest is suddenly cut asunder by the scissors of the fates."

—GOETHE.

MICHIGAN'S DEPARTMENT OF HEALTH

C. C. SLEMONS, M.D., Dr.P.H., Commissioner
LANSING, MICHIGAN

New County Health Departments

The addition of six more counties this month to the list of Michigan counties having full-time, trained public health organizations will put the state well over the halfway mark in the number of counties provided with this service. Iron, Chippewa, Mason, Manistee, Osceola, and Mecosta counties are the new additions, making a total of 46 counties having organized health departments. When these new departments are functioning, 46 per cent of Michigan's rural population will be served by full-time public health officials.

Iron and Chippewa voted to set up individual county organizations. Mason and Manistee will be organized as a two-county district, as will Osceola and Mecosta. These county units are made possible through funds provided by the Social Security Act and administered by the United States Public Health Service. The State appropriates \$3,000 and the remainder is raised by the county itself.

Approximately \$233,000 in Social Security funds is available in Michigan for establishing and maintaining local health units and for assisting the more impoverished units already organized to maintain a minimum standard of efficiency. Additional local health units will be organized this year as long as sufficient funds are available. In addition to these funds, approximately \$100,000 has been allotted to Michigan by the U. S. Children's Bureau for an expansion of the maternal and child hygiene program.

It will take considerable time for these new health units to get under way, for qualified personnel is not available at present. Intensive training courses are in progress now for this purpose. The University of Michigan has been chosen as the training center in this area for five states. Five physicians, six sanitarians and twenty-eight nurses from Michigan will receive three months of academic training at the University and a month of field work before being assigned to their posts. Additional training courses and scholarships are being planned for the future.

New Rules and Regulations

The 1936 edition of the Rules and Regulations for the Control of the Common Communicable Diseases has recently been issued and distributed to all health officers. It is also available to physicians upon request.

There are certain changes in the 1936 regulations, most especially in regard to typhoid fever and poliomyelitis. Three consecutive, negative release cultures of feces are now required for typhoid cases, whereas two was the number heretofore. (A recent study of cultures of feces during and following convalescence of typhoid cases has revealed that three cultures will "pick up" a considerably larger percentage of carriers than will two consecutive negative specimens.) The definition of typhoid carriers is also given and specifications as to their control is exemplified.

The quarantine period for cases of poliomyelitis as well as the isolation time for contacts has been changed from three weeks to two weeks.

On the first page of the regulations there is

given, as has been customary in former editions, a list of those diseases which are reportable. In this connection it may not be amiss to point out that some physicians either are not aware of the fact that some of the minor diseases are reportable or at least they neglect to report such cases which may come to their attention. Likewise, some of the more rare diseases are sometimes overlooked by physicians as being reportable.

All reportable diseases should be brought to the attention of the local health officer with the exception of venereal diseases in districts where there is not a full-time health officer. In such localities venereal diseases should be reported direct to the Michigan Department of Health on special blanks provided for that purpose.

Every physician is requested to refresh his memory by taking notice of all diseases included in the list, and, if such a list is not already available in his office, a copy of the Rules and Regulations should be requested either from the local health officer or the Michigan Department of Health.

The following diseases shall be reported:

Actinomycosis	Paratyphoid
Ankylostomiasis	Plague
(Hookworm)	Pneumonia (Acute lobar)
Anthrax	Polio-myelitis
Chickenpox	(Infantile paralysis)
Cholera	Rabies
Dengue	Rocky Mt. Spotted Fever
Diphtheria	Scarlet Fever
(Membranous Croup)	(Scarlatina, Scarlet Rash)
Dysentery-amebic	Septic Sore Throat
Dysentery-bacillary	Smallpox
Epidemic encephalitis	Syphilis
(encephalitis lethargica)	Tetanus
Erysipelas	Trachoma
Favus	Trichiniasis
German Measles	Tuberculosis (all forms)
Glanders	Tularemia
Gonorrhea	Typhoid Fever
Influenza	Typhus Fever
(In epidemics only)	Undulant Fever
Leprosy	(Malta Fever)
Malaria	Vincent's Angina
Measles	(Trench Mouth)
Meningococcus Meningitis	Weil's Disease
(Cerebro-spinal Fever, epidemic)	(Infectious Jaundice)
Mumps	Whooping Cough
Ophthalmia neonatorum	Yellow Fever
(Acute infectious conj.)	

Survey of the 120 acre site of the new state tuberculosis sanatorium to be built at Gaylord has been made by the bureau of engineering of the Michigan Department of Health, and plans for wells, water mains, sewers and a sewage disposal plant are now under way. Bids have been received for construction of the wells and of the sewers, and they will soon be received for building of the sewage disposal plant.

Construction of both water and sewerage systems is being supervised by the bureau of engineering.

* * *

Action has been taken by Grosse Isle Township to substitute a safe for an unsafe water supply. With WPA assistance, new water mains will be built and water will be secured from Detroit. This will do away with the present method of using highly polluted water from the Detroit River, and it will undoubtedly result in a lowering of the community's high typhoid fever death rate.

Laboratory Staff Additions

Several members have been added to the technical staff of the bureau of laboratories recently.

J. L. Tripp, Ph.D. in biochemistry from Purdue, is to have supervision of the concentration of anti-toxins.

Beulah D. Westerman, Ph.D. in biochemistry and bacteriology from the University of Illinois, will specialize in the preparation of antipneumococcic serum.

Russell Y. Gottschall, D.Sc. in chemistry and bacteriology from Pittsburgh, will have charge of the manufacture of purified protein derivative of tuberculin.

Janet Bourn, Ph.D. in bacteriology and immunology from the University of Chicago, is to have the management of the background bacteriology in the laboratories, handling stock cultures and the isolation of bacteria causing pneumonia and meningitis in Michigan to be used in the manufacture of serums. Dr. Bourn has done special research on colds at Johns Hopkins.

C. B. Line, M.S. from the University of Michigan, and D.V.M. from Michigan State College, will have charge of all veterinary work at the biologic plant.

Rosero Reyes, M.S. in bacteriology from the University of Michigan, with secretarial training at the University of the Philippines, is to be technical secretary of the bureau of laboratories, with general supervision of all records of registered laboratories.

A Survey of Obstetric Practice

Recognizing the fact that there is much about obstetric practice that physicians as well as lay people should know, the Committee on Maternal Health of the Michigan State Medical Society proposes to undertake a joint study with the United States Public Health Service on the subject of obstetric care, the specific purpose being the evaluation of obstetric practice on the basis of factors other than mortality alone. No similar study has heretofore been made. The committee recognizes the vastness of its undertaking and is aware of the many difficulties to be overcome. The unpopularity of questionnaires is keenly felt but it is believed that in this instance the end justifies the means. If the study can be successfully completed it should go a long way toward clarifying existing confusion regarding obstetric practice. Every physician who finds it difficult to accept without equivocation an estimate of obstetric care based entirely upon mortality among puerperal women will welcome this opportunity to assist in evaluating obstetrics upon more adequate basis. The proposed study has the approval of the Executive Committee of the Michigan State Medical Society. Dr. C. C. Slemmons, Commissioner of Health, has declared his approval of the project. The United States Public Health Service is willing to cooperate and the cooperation of every citizen in the state is also needed.

GENERAL NEWS AND ANNOUNCEMENTS

THE 100 PER CENT CLUB OF THE MICHIGAN STATE MEDICAL SOCIETY

1. Eaton County Medical Society
2. Grand Traverse-Leelanau-Benzie County Medical Society
3. Ingham County Medical Society
4. Lenawee County Medical Society
5. Luce County Medical Society
6. Manistee County Medical Society
7. Mecosta-Osceola County Medical Society
8. Midland County Medical Society
9. Muskegon County Medical Society
10. Newaygo County Medical Society
11. Oceana County Medical Society
12. Ontonagon County Medical Society
13. Ottawa County Medical Society
14. Saginaw County Medical Society
15. Saint Clair County Medical Society
16. Schoolcraft County Medical Society
17. Shiawassee County Medical Society
18. Tuscola County Medical Society

The above county medical societies have paid dues in full for each and every member of the County and State Medical Societies.

Afflicted child commitments for the month of April, 1936, totaled 1,200, of which 311 were sent to the University Hospital.

* * *

Dr. J. D. Brook, Grandville, was Chairman of the Credentials Committee of the House of Delegates, A.M.A., at its session in Kansas City, May 11, 1936.

* * *

"Michigan State Medical Society Night" was celebrated in Battle Creek by the Calhoun County Medical Society on Tuesday, June 2, 1936.

* * *

The twenty-fifth re-union of the Class of 1911 of the Detroit College of Medicine will be held at the Wayne County Medical Society, Wednesday, June 17, 1936, at 7 P. M.

* * *

The SERA report of May 8: Employable persons, 17,865; unemployables, 26,184; resident relief cases, 66,274; nonrelief service employees, 98; administrative employees (nonrelief), 2,029.

* * *

State Board examinations will be conducted by the Michigan State Board of Registration in Medicine in Detroit on June 8, 9, and 10, and in Ann Arbor on June 10, 11, and 12, 1936.

* * *

Do you wish additional copies of the Brief on socialization of medicine for your friends? If so, please drop a postal card to the Executive Office of the State Society in Lansing. No charge.

June, 1936

The Seventy-first Annual Meeting of the Michigan State Medical Society, September 21, 22, 23, 24, 1936, at Book-Cadillac Hotel, Detroit. Get your hotel reservations before the sell-out.

* * *

Members of the Muskegon Medical Society were guests of the Muskegon Bar Association at the Country Club on June 3. Dr. Harry Hoffman, psychiatrist for the Criminal Courts of Cook County, Chicago, was guest speaker.

* * *

You may secure a medical history of Michigan by sending a postal card to the Executive Office, 2020 Olds Tower, Lansing. The price for this very complete history, which comprises two volumes, has been reduced to \$5.00.

* * *

Group medical practice is ruled illegal in Pennsylvania, according to the decision of Insurance Commissioner Owen B. Hunt, who ruled on March 11, 1936, that this type of practice was unlawful business under the state insurance laws.

* * *

July 20, 1936, is the deadline date for county medical societies that desire to invite the Michigan State Medical Society to hold its 1937 meeting in their community. Send your communication to the Speaker of the House of Delegates, 2020 Olds Tower, Lansing.

* * *

"Practice of Medicine by a Corporation Illegal" is the title of an article covering the opinion handed down on February 14, 1936, by the Supreme Court of Illinois, published in the Bulletin of the A.M.A., April 1936 issue, page 79. Be sure and read this interesting decision.

* * *

If you have given medical service to an afflicted or crippled child during the period from January 1 to June 30, 1936, please render your bill under the two state laws (through the hospitals), basing same on Schedules A, B, C, and D. This will help in compiling accurate cost data.

* * *

The Attorney General ruled on April 22, 1936, that the annual reports of insurance companies are public records, when filed in the office of the Insurance Commissioner, and are subject to inspection with a right to making memoranda therefrom the same as any other public record.

* * *

Approximately 125 booths will be used in the scientific and technical exhibits at the M.S.M.S. annual meeting in September. The show will be the largest in the history of the Society. In addition, the Woman's Auxiliary will present a Hobby Show, portraying the varied avocations of Michigan physicians and their wives.

* * *

The 44th Annual Convention of the Association of Military Surgeons will be held in Detroit on October 29, 30, and 31 of this year. The Association is made up of medical men—active, retired and Reserves—from the various Government Services (Army, Navy and Public Health Service), and eligible officers are invited to become members and to continue their contact with the Services.



Group of physicians from seven counties in Michigan—Allegan, Barry, Branch, Calhoun, Eaton, Hillsdale and Van Buren—who attended the postgraduate course conducted by the W. K. Kellogg Foundation at Washington University, St. Louis, Missouri, two weeks beginning April 13, 1936.

Reading from left to right, starting at the lower left hand corner, the physicians are as follows:

1. E. Van Camp, 2. S. Far, 3. J. Sterling, 4. B. Farwell, 5. G. Rigtierink, 6. H. Hughes, 7. J. Miller, 8. T. Wilensky, 9. B. Selmon, 10. A. Hamilton, 11. M. Bowers,
12. H. Scovill, 13. B. Diephuis, 14. F. Boothby, 15. G. Fisher, 16. A. McNabb, 17. C. Fahndrich, 18. J. Elliott, 19. P. Quick, 20. F. Melges, 21. C. Flinn, 22. J. Bates,
23. N. Murphy, 24. E. Brunson, 25. W. Young, 26. J. Hawkey, 27. J. Kingma, 28. E. Laird, 29. G. Penberthy, 30. E. Martindale, 31. F. LaFrance, 32. C. Lund, 33. C. Poppen,
34. C. Lathrop, 35. C. Royer, 36. J. Giffen, 37. K. Olmstead, 38. C. Sevens, 39. J. Van Ness, 40. W. Bopé, 41. A. Humphrey, 42. W. Hoyt, 43. J. Gething, 44. R. Wade,
45. N. Aldrich, 46. A. Giddings, 47. J. Robert, 48. W. Marriott, 49. G. Hanke, 50. G. Byington, 51. R. Walker, 52. H. Allen, 53. P. Henderson, 54. L. Ladd, 55. C. Merritt,
56. A. Nelson, 57. M. Kinde, 58. F. Walters, 59. L. McNair, 60. P. Brown, 61. K. Rees, 62. W. Haughey, 63. G. Hafford, 64. E. Schilz, 65. H. Wing, 66. I. Lawther,
67. W. Broad, 68. B. Green, 69. F. Sassaman, 70. S. Lowe, 71. J. Yeagley, 72. S. Rowe, 73. R. Harkness, 74. F. Leader, 75. S. Schultz, 76. J. Phillips,
77. N. Abbott, 79. R. Finnie, 80. W. Allegier, 81. P. Bonifer, 82. D. Hargrave, 83. W. Howard, 84. C. Bower, 85. L. Verity, 86. O. Stuck, 87. J. Thomas, 88. P. Engle,
89. S. Church, 90. A. Shrets, 91. P. Bonifer, 92. L. Clark, 93. R. Winslow, 94. T. Meyer, 95. H. Hansen, 96. W. Clynoweth, 97. M. Beckett, 98. B. Swift, 99. J. Maxwell,
100. E. Osmun, 101. C. Ten Houten, 102. A. Hoyt, 103. H. Wedel, 104. R. Baribeau, 105. E. Derickson.

A NOTEWORTHY DEMONSTRATION

During the past four years, the W. K. Kellogg Foundation has been carrying on a program in medical education for physicians in the area in which the Michigan Community Health Project is being sponsored, which consists of seven counties in southwestern Michigan, namely: Allegan, Barry, Branch, Calhoun (exclusive of the city of Battle Creek), Eaton, Hillsdale, and Van Buren, having a total population of 280,000. There are 171 physicians in the above named counties, and, in addition, 66 in the city of Battle Creek. The physicians who practice in the city of Battle Creek and in Calhoun County are participating in the county program and are therefore offered the same privileges in regard to medical education as other physicians in the area. The medical program of the W. K. Kellogg Foundation consists of scholarships being offered physicians each year, qualified speakers provided for medical meetings, and library service. The graduate courses have been developed at the request of the physicians and covered subjects in which they are most interested, with emphasis on pediatrics, medicine, obstetrics, and preventive medicine. All of the courses have been designed particularly for the general practitioner and have been conducted along practical lines, giving the physician something that could be taken home and used in his daily practice. Better than 81 per cent of the physicians, exclusive of the city of Battle Creek, have attended these courses.

NINE REFRESHER COURSES BY KELLOGG

The last course (the ninth group of physicians to accept scholarships) was held at the Washington University Medical School in St. Louis from April 13 to 25 and one hundred and eleven (111) physicians were in attendance, travelling from Battle Creek to St. Louis by special pullman train. Upon arrival in St. Louis, the entire group was housed at one large hotel conveniently located. The generalized course consisted of lectures accompanied by lantern slides and demonstration of techniques and also presentation of clinical material. In addition to the regular scheduled course, physicians who were interested in special branches were given an opportunity to spend as much time in that department as they desired, the course being flexible and giving each physician the thing he was most interested in. A mimeographed synopsis of all lectures was handed out to each physician in a book binder at the end of the course.

ST. LOUIS HEALTH COMMISSIONER ENTHUSIASTIC

The Washington University held two complimentary dinners, one each week, providing a program consisting of subjects the physicians were interested in hearing discussed. One of the outstanding speakers was Dr. J. F. Bredeck, Health Commissioner of the city of St. Louis, who spoke on the relationship of the physician to a health program, and praised the Kellogg demonstration as a big step in the right direction.

During the two weeks there were several guests present, Dr. G. C. Penberthy, President of the Michigan State Medical Society; Dr. C. C. Slemons, Michigan State Health Commissioner; Dr. Frank Wilson of the University of Michigan; Dr. L. Fernald Foster, Chairman of the County Secretaries Association; Dr. B. R. Corbus, Member of the State Advisory Committee on Post Graduate Education, and Mr. Wm. J. Burns, Executive Secretary of the Michigan State Medical Society.

During the two-week period other luncheons and dinners were held, one in honor of Dr. G. C. Penberthy and another for Dr. C. C. Slemons, and other guests.

An evening dinner was given by the physicians attending the course for members of the W. K. Kellogg Foundation staff who were present. This was to show their appreciation of the medical education and other types of assistance given their communities by the Foundation.

Dr. W. McKim Marriott handled the course admirably and was ably assisted by the entire faculty of the Washington University Medical School.

* * *

Pediatrics a Popular Course

The Post-Graduate course in Pediatrics under the auspices of the Department of Post-Graduate Medicine of the University of Michigan and the Michigan State Medical Society, was given on April 20, 21, and 22 at the Children's Hospital and the Henry Ford Hospital, Detroit. The following doctors attended this course:

Doctors James R. Adams, Dearborn; Florence D. Ames, Monroe; Robert J. Armstrong, Kalamazoo; Walter F. Bach, Detroit; George M. Baker, Parma; Joseph A. Bakst, Detroit; Florence A. Browne, Detroit; Constantine A. Cetlinski, Hamtramck; Ward L. Chadwick, Grand Rapids; Henry G. Chall, Detroit; Glenn T. Clements, Ann Arbor; Aileen B. Corbit, Oxford; Peter H. Darpin, Detroit; Adolph E. Dreyer, Detroit; John W. Edwards, Ferndale; John L. Gates, Ann Arbor; Andros Gulde, Chelsea; Edith Hall-Kent, Lansing; Fred R. Hanna, Lapeer; Wm. L. Harrigan, Mt. Pleasant; Bernard L. Johnson, Deshler, Ohio; Joseph B. Kass, Detroit; William L. Kemp, Birmingham; Rockwell M. Kempton, Saginaw; Herbert K. Kent, Lansing; Wheeler H. Kern, Garden City; John G. Kirker, Detroit; David Kliger, Detroit; Earl J. Knaggs, Lapeer; Martin E. Kohn, Detroit; Arthur J. Loeffler, Lincoln Park; Pedro O. Martinez, Detroit; Emil V. Mayer, Detroit; Edward M. Mead, Detroit; Harry C. Metzger, Detroit; Hugh H. Miley, Detroit; Paul F. Orr, Perrysburg, Ohio; Emmett M. Pettis, Muskegon; Otto J. Preston, Flint; E. E. Rakestraw, Findlay, Ohio; Charles L. Rivard, St. Clair Shores; Aaron Z. Rogers, Lochmoor; Kathleen Braithwaite-Sanborn, Windsor, Ontario; Charles W. Sawers, Watford, Ontario; Morris Schaner, Toledo, Ohio; Robert A. Stephenson, Flint; Earle R. Swift, Lakeview; Cecil E. Tate, Jackson; R. Spencer Taylor, Detroit; Alexander Thomson, Detroit; Frank VanSchoick, Jackson; John D. Van Schoick, Hanover; David R. Wark, Flint; Howard B. Weaver, Canton, Ohio; Edw. C. Mosier, Otisville; A. W. Peterson, Battle Creek.

* * *

Schedules A, B, C, D. The Michigan State Medical Society has ascertained on good authority that Governor Frank D. Fitzgerald will re-establish Schedules A, B, C, and D—fee schedules for the medical and hospital care of afflicted and crippled children under the two state laws—as of July 1, 1936, with the beginning of the State's fiscal year. Negotiations are still in progress by the MSMS Committee relative to fees for medical care performed during April, May and June, 1936.

The State of Michigan has definitely earmarked \$100,000 for the care of crippled children (not afflicted children) for the year beginning July 1, 1936, in order to qualify for a like sum from Social Security funds.

* * *

The Debate Club of St. Mary's High School, Lansing, Michigan, debated before the High School assembly on April 30, the pros and cons of free state medicine through governmental administration. The question was: "Resolved: That the several states should enact legislation providing for a system of complete medical service available to all citizens at public expense."

Thomas Costigan, the chairman, gave a brief history of the movement from its earliest beginning. The negative side, which was well supported by Mr. Matthew Zipple, Miss Lee Youngs and Miss Regina Bauman, defeated the affirmative side, composed of Miss Mary Dakin, Miss Helen Horn and Miss Doris Pung.

The Bulletin of the Muskegon County Medical Society is a monthly publication which is especially noteworthy for the vigor of its editorials. These fearless messages strike to the core of medical problems facing the medical profession of that county, and offer solutions of a most practical nature. The *Bulletin* also contains announcements of the County Medical Society meetings and general news notes.

* * *

"Iodine socks" imported from England and recommended as "invaluable to sufferers from gout, rheumatism, flu, colds, varicose veins, bad legs, corns, bunions, and aching feet" were recently seized and destroyed by the Food and Drug Administration officials in Philadelphia and Baltimore. This panacea is something new in quackery.

* * *

A certain group of your friends makes possible the publication of this excellent Journal—the advertisers! Your pleasure in reading The Journal each month is due in great measure to the advertisers' interest in your work and their co-operation in your endeavors for better medicine and public health. Tell these good friends you read their message. Patronize them.

* * *

Every physician registered under the Harrison Narcotic Law must re-register on or before July 1 with the collector of internal revenue of the district in which he maintains an office or place for the treatment of patients. There is a severe penalty for failure to register on or before the date. In default of registering or re-registering, a physician is liable to a fine not exceeding \$2,000 or to imprisonment for not more than five years or to both.

* * *

Baseball at Navin Field is planned as one of the entertainment features for the Annual Meeting of the M.S.M.S. in Detroit. On Tuesday, September 22, Detroit will play St. Louis. Arrangements have been made to secure a block of choice seats for physicians and their wives who wish to see this game. If interested, drop a card to the Executive Secretary, 2020 Olds Tower, Lansing. Indicate the number of seats you wish.

* * *

The Scientific Exhibits Committee of the Michigan State Medical Society, appointed to prepare the scientific exhibit for the 1936 annual meeting, and to arrange for the award of medals, et cetera, is composed of Dr. C. T. Ekelund, Chairman, Dr. S. W. Donaldson, Dr. William German, Dr. A. E. Schiller, and Dr. E. R. Witwer. Michigan physicians interested in exhibiting at Detroit next September are invited to write Dr. Ekelund, 906 Riker Bldg., Pontiac.

* * *

Registration of Narcotic Taxpayers for the year beginning July 1, 1936: In order to avoid a delinquency charge, forms 678 and 713 for re-registration must be executed and returned to the collector's office on or before July 1, 1936. Forms must be received in the collector's office before July 1; those mailed on July 1 and received on July 2 or 3 are regarded as delinquent. If your blanks are not received in ample time, request same by writing to the Collector of Internal Revenue, 555 Federal Bldg., Detroit.

* * *

The Bureau of Information of the Michigan State Medical Society is being developed by the Public Relations Committee and will swing into

full action about June 15, 1936. The result of this program of information to the press and to the people will be a better physician-public relationship and more friends for the organized medical profession and the individual practitioners of this State. The Bureau's work will necessitate the creation of speakers' bureaus by county medical societies, resulting in closer contact with the people.

* * *

Dr. L. Fernald Foster of Bay City, chairman of the Public Relations Committee, Michigan State Medical Society, has made scores of appearances before county medical societies since the first of the year to explain the integration program of the State Society and the Filter System. During the past month, Dr. Foster has been invited by and spoken to the Tuscola County Medical Society at Wahjamega, the St. Clair County Medical Society at Port Huron, the Manistee County Medical Society at Manistee, the Ionia-Montcalm Medical Society at Portland, and the Branch and Hillsdale County Medical Societies at Coldwater.

* * *

In the *Bulletin of the Calhoun County Medical Society*, a schedule of appointments on the Medical Filter for Battle Creek is published. The committees change on the first and fifteenth of each month and the place of meeting also rotates each week to cover the various hospitals. The *Bulletin* story reads in part: "We are endeavoring to demonstrate that we can reduce the amount of work coming under these acts by the elimination of unnecessary medical and hospital attention. Please see to it that only those children who are definitely handicapped for want of medical attention are passed."

* * *

State Board of Registration in Medicine

Dr. Fred H. Cole of Detroit has been appointed to the state board of registration in medicine to succeed Dr. John E. Handy of Caro. The State Board of Registration in Medicine is made up of Drs. J. B. Brook of Grandville, Fred H. Cole of Detroit, Claude R. Keyport of Grayling, Harold L. Morris of Detroit, J. Earl McIntyre of Lansing, E. W. Schmoor of Grand Rapids, W. E. Teu of Bessemer, E. S. Thornton of Muskegon, John J. Walsh of Escanaba, and T. G. Yeomans of Flint. The officers of the board are Dr. Yeomans, President; Dr. H. L. Morris, Vice-President, and Dr. J. Earl McIntyre, Secretary.

* * *

The Filter System is still working and gaining new friends for the medical profession in various counties of the state. The following letter from the Secretary of Superintendents of the Poor of St. Clair County is typical of many communications which officers of the State Society and the county medical societies are receiving:

Dr. D. W. Patterson,
622 Huron Avenue,
Port Huron, Michigan
My Dear Dr. Patterson:

In regard to our conversation as to benefits of the Filter Board, will say that we believe that there has been a reduction in the cost of hospitalization through our department of about 40 per cent.

We feel that the most of the credit for this should go to the Filter Board.

We feel that the activities of the Board should be continued with perhaps a few changes.

Yours very truly,

Signed J. R. Kells, Secretary,

Superintendents of the Poor,
St. Clair County, Port Huron, Mich.

April 17, 1936.

Dr. Allen Honored

Raymond B. Allen, M.D., Ph.D., addressed the annual meeting of the Wayne County Medical Society, May 18, on Trends in Medical Education. He assumes the duties of Dean of the Wayne University College of Medicine. Dr. Allen is former associate dean of the Columbia University Medical School and associate director of the New York Post-Graduate School and Hospital. He is a grad-



DR. RAYMOND B. ALLEN
Dean of the Medical Department,
Wayne University, Detroit



DR. WM. J. STAPLETON, JR.
Associate Dean of the Medical Department,
Wayne University, Detroit

Wednesday afternoon, scientific exhibits by the Medical School Faculty will be shown. Entertainment—Baseball, Detroit vs. Washington.

Wednesday evening will be devoted to reunion dinners of classes of 1931, 1926, 1921, 1916, 1911, 1906, 1896, and 1891.

Thursday morning, clinical programs will be given in the Detroit hospitals. Thursday afternoon, one o'clock, inspection tour of Parke, Davis

uate of the University of Minnesota, having completed his medical education in 1928 with the degree M.D. and Ph.D. in Urology. Following a short period as practicing physician in Minot, N. D., he worked as a research fellow at the Mayo Clinic. He is the author of numerous papers on urology and on some phases of medical education, particularly post-graduate work.

A complimentary dinner was tendered Dr. Allen at the Wayne County Medical Society club rooms before the scientific meeting at which over a hundred members of the society were present. Dr. Allen's address to the members of the Wayne County Medical Society will appear in the July number of THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY.

* * *

The Clinic of the Alumni Association of Wayne University College of Medicine will be held June 17 and 18, 1936. The program in the College Auditorium, 629 Mullett Street, Detroit, on Wednesday, June 17, will include:

- 8:30—Clinical Pathological Conference—Dr. Osborne A. Brines.
- 9:30—Peptic Ulcer—Dr. Frederick G. Buesser.
- 10:00—Surgery of the Biliary Tract—Dr. Clark D. Brooks.
- 10:30—Common Dermatological Conditions—Dr. Robert C. Jamieson.
- 11:00-12:00—The Function of the Medical School in Continued Medical Education—Dr. Raymond B. Allen.

& Company plant; 2:00 p. m., boat ride and annual meeting on the Steamer Put-In-Bay.

* * *

A. M. A. Contingent from Michigan

Among those from this state who attended the eighty-seventh annual session of the American Medical Association at Kansas City were the following:

From Ann Arbor: Drs. F. A. Collier, A. E. Furstenberg, U. J. Wile, S. W. Donaldson, C. E. Badgley, R. H. Freyberg, E. A. Hand, C. B. Pierce, M. M. Fenton, E. A. Kahn, W. G. Maddock, Bethell, R. C. Hildreth, L. J. Johnson, R. L. Kahn, H. B. Rothbart, C. C. Sturgis. From Battle Creek: N. O. Byland, J. E. Cooper, C. S. Gorsline, L. Jespersen, W. B. Lewis, P. Roth, B. L. Selmon, G. W. Slagle, B. Whyte, J. E. Rosenfeld. From Bay City: D. J. Mosier, W. S. Stinson, G. M. Brown, W. G. Gamble, C. A. Grooms. From Belleville: Dr. H. F. Robb; from Big Rapids: Dr. H. Hartgraves.

Dr. C. E. Merritt attended from Coldwater; Dr. F. G. Slattery from Clare.

From Detroit: Drs. M. E. Danforth, L. E. Daniels, F. E. Hansen, V. Harrell, R. D. McClure, J. K. Ormond, E. A. Potts, A. E. Bernstein, O. A. Brines, J. J. Corbett, J. H. Dempster, A. H. Dowdy, J. T. Harper, Parker Heath, A. Isaacson, A. F. Jennings, J. C. Kenning, E. E. Martner, J. C. Montgomery, E. A. Potts, H. F. Sawyer, R. H. Stevens, J. E. G. Waddington, E. L. Whitney, W. J. Wilson, S. S. Altshuler, J. L. Baltz, H. Berman, A. R. Bloom, A. L. Brooks, W. L. Brosius, J. L. Chester, W. K. Clinton, W. C. Cole, C. M. Coll, T. B. Cooley, I. G. Downer, C. E. Dutchess, B. N. Estabrook, D. P. Foster, S. E. Gould, F. W. Hartman, L. N. Hershey, L. J. Hirschman, P. J. Howard, D. A. Jackson, H. I. Kallet, S. J. Levin, E. Lipkin, H. A. Luce, E. J. Lynch, E. G. Martin, E. W. May, F. M. Meader, E. A. Mishropp, D. H. O'Donnell, R. A. Perkins, J. P. Pratt, L. Reynolds, C. T. Root, D. J. Sandweiss, H. C. Scholer, E. M. Shebesta, B. R. Shurly, C. L. Straith, G. L. Waldbott, P. F. Morse and T. K. Gruber.

From Flint: Drs. R. G. Pett, B. A. Credille, and F. B. Miner; and Dr. E. L. Spoehr from Ferndale. From Grand Rapids: Drs. R. E. Smith, L. R. Grant, A. M. Hill, F. Smith, L. C. Bosch, R. M. Eaton, R. E. Sculley, C. H. Snyder, D. Chandler, A. Dean, J. C. Droste, L. A. Ferguson, W. B. McWilliams, J. D. Vyn and C. A. Stimson. From Eaton Rapids: Dr. E. V. Thiehoff; Dr. W. C. Reid of Goodrich; Dr. J. D. Brook from Grandville; Dr. C. R. Keyport from Grayling; J. P. Parsons, Grosse Pointe; R. B. Harkness, Hastings; R. K. Curry, Homer; H. C. Hill, Howell; D. J. McColl, Huron; D. A. Levine, Iron River; W. H. Wacek, Ironwood; A. M. Shaeffer, Jackson; W. A. Murray, G. H. Caldwell, Kalamazoo. From Lansing: Drs. H. A. Miller, Behen, H. L. French, R. J. Morrow, J. F. Sanden, K. W. Toothaker; from Marquette: Drs. M. Cooperstock, M. Stevenson; from Muskegon, Drs. E. Q. D'Alcorn, A. F. Dasler; Dr. E. M. Jones, Northville; W. B. Filingar, Orid; from Pontiac, Dr. C. T. Ekelund; from Saginaw Drs. D. C. Durman, S. Yutema, L. A. Campbell, O. W. Lohr, J. P. Markey; and Dr. D. M. Kane from Sturgis.

IMPORTANT "DON'TS"

If members will learn to observe the following advice they will save themselves from much trouble:

1. Don't assign accounts to a collection agency until you ascertain the standing and reputation of the agency.
2. Don't fall for "directories" that promise you business if you will pay a certain sum for listing your name.
3. Don't take out an insurance policy because you are given a promise of appointment as a medical examiner or member of their panel of physicians.
4. Don't operate on a minor without written consent of the parent or guardian.
5. Don't perform a sterilization operation on a minor without a *court order*. On those who have attained their majority, secure written consent.
6. Don't operate on anyone without a clear and full understanding as to the nature of the operation. See *The Journal of the American Medical Association*, p. 33, January 4, 1936, issue, for forms for consent for operations, examinations, and autopsy.
7. Don't sue for a fee until the statute of limitations has prevented any counter suit for malpractice.
8. Don't report on services rendered to life insurance companies without patient's consent. Obtain fee for these reports from the company.
9. Don't make affidavits until you know their purpose.
10. Don't fail to obtain consultation or advice when you are in doubt.
11. Don't employ lay technical x-ray and laboratory persons. Use licensed physician's laboratories.
12. Don't violate patients' confidential physician-patient relationship.
13. Don't fail to keep complete accurate records.
14. Don't be an easy mark in falling for agents' representations.
15. Don't sign till you know what you are signing.
16. Don't fail to consult your investment banker before investing in any business or promotion scheme.
17. Don't prescribe narcotics for transient persons.
18. Don't sign a death certificate if you have not seen the patient within thirty-six hours before death. Call the coroner.
19. Don't neglect carrying indemnity defense insurance.
20. Don't break the Golden Rule.

—*California and Western Medicine.*

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column and this will be deemed by us a full compensation to those sending them. A selection will be made for review, as expedient.

PARENTERAL THERAPY, A READY REFERENCE MANUAL OF EXTRAORAL MEDICATION FOR PHYSICIANS, DENTISTS, PHARMACISTS, CLINICISTS, BIOLOGISTS, NURSES, MEDICAL STUDENTS AND VETERINARIANS. By W. F. Dutton, M.D., formerly medical director Polyclinic and Medico-Chirurgical Hospitals, Graduate School of Medicine, University of Pennsylvania; visiting physician to the Northwest Texas Hospital; and J. B. Lake, M.D., formerly special lecturer in Hygiene, Purdue University; editor Clinical Medicine and Surgery, educational lecturer Illinois State Medical Association. Illustrated with 90 halftones, and line engravings. Price \$7.50. Charles C. Thomas, Springfield, Illinois, and Baltimore, Maryland, 1936.

The authors use the term Parenteral Therapy to include all methods of administering medicine except by the oral or alimentary route. This work is unique in bringing together into one volume descriptions of methods it would require the searching of a vast field of literature both medical and surgical to obtain. Under the subject General Technic of Parenteral Therapy we have listed technical methods in Treatment, Intradermal injections, Hypodermic injections, Technic of intra-muscular injections, Infusions of physiological salt solutions. General technic of intravenous injections, Intraperitoneal injections, Transfusion of blood, Intramuscular injection of whole blood, intracardiac injections, artificial pneumothorax, cisternal puncture, intraventricular puncture, intravenous anesthesia, spinal anesthesia, nerve block by alcohol, inhalation and ionic medication; all methods are well illustrated and described. There is a therapeutic index of over 130 pages, while over 140 pages are devoted to pharmaceutical notes which deal with drugs and vaccines, giving directions for the special dosage in connection with the methods described in the work. The book will be found invaluable for the wide classes of worker for whom it is intended.

CLASSIFIED ADVERTISEMENTS

FOR SALE: SANITARIUM—The Reed School, sanitarium for backward and nervous children. Established sanitarium for care of mentally defective children. Founded in 1900—established reputation of second oldest school in United States, fully equipped, 26 room building with dormitories and class rooms. Bargain. 1427 Hubbard Avenue, Detroit, Michigan.

MORPHINE AND OTHER DRUG ADDICTIONS—Institutional care and treatment of selected patients who have responsibilities, wish to make good and learn how to keep well; methods easy, regular, humane. Twenty-eight years' experience. Dr. Weirick's Sanitarium, Elgin, Ill.

CHARTERS' MATERNITY HOSPITAL

A private hospital and home for young women desiring seclusion. Patients accepted any time during gestation. Physicians are requested to furnish a prenatal certificate. Rate reasonable. FLUSHINGMICHIGAN

THE JOURNAL

OF THE

Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. 35

JULY, 1936

No. 7

PROBLEMS AND TRENDS IN MEDICAL EDUCATION*

RAYMOND B. ALLEN, M.D.†

Dean, Wayne University College of Medicine

DETROIT, MICHIGAN

I am delighted to be here this evening, for, as your president has indicated, I have but recently joined the medical family of Detroit and Michigan. Nothing could be more appropriate, more suited to my purposes, than to be given this early opportunity to meet you and to discuss briefly and frankly some of the problems and trends in medical education. It is impossible for me to conceal my youth, but I am mature enough to know that it is only by coöperative effort, orderly evolution and intelligent administration that we as a profession may hope to meet the challenge which the conditions of modern life are thrusting upon us.

Everyone appreciates that the nation has no greater asset than the health of the people. Medical science has made major contributions to social welfare for many crippling and health-destroying diseases are controllable or preventable. As custodian of such knowledge and skill it is our responsibility to make these benefits available to the people. This was relatively simple when the benefits of medical science were few. With progress of science in all of its branches and the associated changes in industry and society the problem of adequate medical care has become infinitely more complex. The ease and rapidity of modern systems of communication and transportation have given many rural sections of the country an essentially urban character. Profound changes in family life and the functions of the home in relationship to society and an increased velocity of change of residence have introduced social

and economic factors into the problem of medical service which as yet are incompletely understood. Moreover, when we reflect that the advance in medical science in the last forty years has been greater than in the previous four thousand, we appreciate something of the kaleidoscopic, not to say revolutionary, character of our times.

Despite the rapidity of change, the medical profession has shown great adaptability and flexibility in meeting the demands placed upon it. We have co-operated in the development of various technics and methods whereby medical and health services have been made more readily available to a larger proportion of the people. Community programs of disease control depend in large measure for their effectiveness upon a highly trained, skillful and resourceful medical personnel. There is wider appreciation of the fact that many phases of medicine are concerned with social rather than purely biological problems. This is indicated by the rapid growth of a variety of social and medical agencies as aids to

*Read before the Wayne County Medical Association at its annual meeting, May 18, 1936, Detroit Institute of Arts.

†For professional note see June Journal M. S. M. S., page 431.

physicians in serving the health needs of the public. This development has been so rapid that today physicians comprise roughly only 10 per cent of the health personnel of the country.⁴ Obviously this means that our influence and responsibilities have increased greatly, perhaps tenfold, since the day when the doctor was the only guardian of health. The adequate training and direction of this vast army of workers in the best interest of the public is a legitimate function of our profession. The activities of public health nurses, medical technicians, physio-therapists, medical social workers and lay medical aids of all kinds should be under the direction of physicians if the health of the people is to be adequately safeguarded. No one but the physician is qualified to delegate health service functions into non-professional hands.

It is not astonishing that these highly significant developments have resulted in serious dislocations in the economic and social status of the doctor.² This is a matter of grave concern in medical education for the emoluments and positions of the physician in society are "important influences in determining the types of students and to a large degree, therefore, the future level and interests of the profession."³

It is becoming increasingly clear that, even were it desirable, we could not isolate a medical school from contact with social and economic problems of medical service. Medical schools are no longer merely repositories of medical knowledge wherein students and faculty pursue the culture of medicine, giving little or no thought to the broad social implications and obligations of their work.¹¹ Today the medical school is, or should be, a vital center in the medical life of the community wherein anything that concerns the health of the people is an object of study. Medical schools are gradually emerging from a period of intensive concentration upon purely scientific pursuits in the laboratory and are permeating the whole structure of the community. Hospitals and out-patient departments have become the laboratories of medical schools for here students and patients, the twin units of medical education, can be in sustained contact under the benignant eye of the clinician. Penetration of the community by the student beyond the limits of the hospital is just commencing. The student

is eager to learn more about the relationship of the doctor to his private patients, the health officer to the community, the medical examiner to law enforcement, the public health nurse to public schools, health centers and child welfare clinics, the medical social worker to economic and social problems in the home, the industrial physician to labor, industry, and compensation law, and the physician in group and contract practice to patients. In short, anything that concerns the health needs of the people as consumers of medical services should be an object of observation and study by the student.¹¹ This evolution is resulting in a new focus in medical education that should be emphasized in any discussion of this kind. The patient should be studied as a whole and as a human being, not as a case number or a disease. Evolution?—it is almost a revolution. How we could have forgotten the patient in our study of disease is a mystery. Perhaps that was the price we had to pay for the great advances in the medical sciences and clinical specialties. Disease was studied in the laboratory by scientists and in the ward by clinicians on the theory that it was an entity with great profit to medical science and the patient. Now we recognize, however, that the only really consequential thing from the standpoint of the patient is: "How does the individual react to disease? Is he able to mobilize adequate defenses to overcome it?" This immediately places the emphasis on the patient as a whole and as an individual. There is evidence also that surgical specialists are evolving into something more than an "eye" at the end of a "hollow tube with a light on it" exploring some deep recess of the body.⁸ Doubtless there will be further improvements in the diagnostic and therapeutic machinery of specialists but, if the signs are right, the patient has come into his own as an individual and should be treated accordingly.

It is precisely here that medical education is being reoriented. In many schools, clinical specialists have largely dominated the clinical training of medical students. They have quarreled among themselves for more and more time in the curriculum to teach their specialties. Too often they have made a bad selection of material and confused students with a mass of uncorrelated detailed information which could not be

assimilated and had no real meaning for the student. There is general recognition of the fact that the entire field of medicine cannot be covered in four or five years, nor for that matter in a lifetime. The highly specialized fields should be reserved for the graduate student who intends to specialize. A judicious selection of material for study and emphasis on underlying principles and fundamental biological science will provide the student with the necessary tools to continue his education throughout his professional career. "It is an axiom that all true education is self-education."³ The teacher can accomplish much by appropriate stimulus, inspiration, guidance and explanation; but he is a wise teacher who realizes that he never really taught anyone anything. Students learn; they are not taught. It is the business of a faculty to see that the road to learning is in good repair, and well marked with directions and warnings and not to get too greatly alarmed if, at first, the young traveler occasionally misses his way.

A. Lawrence Lowell, in his trenchant way, has pointed out that the greatest problem in higher education is to select students who have "self-starters."² Medical schools fortunately get their share of such persons—fortunately, for, in medicine, as in other fields, the imagination necessary to get started is the beginning of achievement. The problem here is qualitative, not quantitative. There is no evidence that there are too many physicians possessing qualities of character, idealism, intelligence, imagination, inquisitiveness, capacity to inspire confidence, industry, tolerance, reliability, social-mindedness and sympathetic understanding and insight which have distinguished great physicians since the dawn of history.³ There is general agreement that the aim in the selection of medical students should be to recruit only those students who show promise of measuring up to such standards.

In the matter of selecting material for teaching it would seem for example, that it is more important for a student to know the pathology, signs, symptoms, early diagnosis and differential diagnosis of carcinoma of the stomach than to learn the detailed operative and radiological methods for treating it. He should know that competent surgeons and radiologists are trained to

treat it. Likewise to know when to suspect a brain tumor in a differential diagnosis is more important in the armamentarium of a doctor than to have taken time as a student to learn how a neuro-surgeon operates upon such a case. The general principles of surgery emphasizing precise surgical diagnosis, excluding details of operative methods, have a broad and important field of application in every day general practice. Knowledge of modern methods of handling emergency conditions such as those due to trauma, so common nowadays, is essential.

There are indications that a new type of general practitioner will be required in the future.¹⁰ In any scheme of medical service the first doctor to see the patient occupies a "key" position for it is his responsibility to make a tentative diagnosis, give such immediate treatment as is indicated, and decide whether the services of a consultant are needed. This is a heavy responsibility for unless patients who need such services are seen by consultants, much of modern medical science lies sterile. With the emphasis on preventive medicine and healthful living, with the increase of mild and serious mental and functional disorders and occupational diseases of all kinds due to maladjustments in a changing industrial world, and with the aging of the population, there is great need for the modern *general physician*. The designation, *general practitioner*, no longer applies, for such a physician should scrupulously avoid practicing anything and everything that the patient will permit. Complicated surgery and instrumentation should only be done by those who by training and natural aptitude are qualified to assume such responsibility. The training, therefore, of the *general physician* should be broad and thorough, emphasizing general medical diagnosis and therapy and preventive medicine. As a clinical clerk and an interne the student should observe the work of consultants and specialists and learn to know and appreciate their usefulness, meanwhile steadily improving his knowledge of human beings and disease. The difficulty has been that many physicians got just enough training in surgery and surgical specialties to attempt operations for which they were really quite untrained. The large numbers of unhappy maladjusted people who need medical care and are being told that there is nothing the

matter with them offer a challenge which we have not met. When we do meet it, chiropractors and other "healers" and "quacks" will lose most of their clientele. Here is a challenge which is worthy of our best metal. The *general physician* must be something of a psychologist, sociologist, economist, neuro-psychiatrist, "father-confessor," educator and philosopher to help such persons. Sympathetic understanding and insight by the doctor and a positive regimen of re-education is the prescription which is indicated for these unhappy, neglected people.

In my zeal to emphasize the growing importance of social and economic aspects of medical education and service it should not be understood that the biological and medical sciences are lost sight of. These sciences in some form will undoubtedly always be the basis of scientific medicine. The striking thing today is that most of the active physiological and chemical study is being carried forward in the clinical branches. This is a fine reward for the physiologists and chemists who trained the modern school of clinicians. Another striking development which has gone almost unnoticed is the disappearance of departmental lines in the medical sciences. As in other fields of learning there is a pronounced healthy trend toward unification of medical science which should be encouraged. The time is near when only two, at most three, major divisions of fundamental medical science will have real identity. Fragmentation of clinical medicine into a variety of clinical specialties will probably be with us, perhaps unfortunately, for some time to come, for it is humanly impossible for one physician to be effective in more than one, at most two, clinical specialties.

The spirit of scientific investigation now permeates the whole field of medicine. We must, however, continue to rely on the divisions of fundamental medical and biological science to keep this vital flame alive and burning brightly. The problem here is relatively simple, for the investigator is a person who is born with what was elsewhere referred to as a "self-starter." We may not give him the recognition which is his due, we may be amused by his queer ways, we may not provide a fit place for him to work in nor enough means to insure a modest security, for he is the soul of mod-

esty, but we cannot stop him. A business of first importance in a University is to provide shelter and tools for these vital, ever fresh and priceless minds, for they are preoccupied with charting the roads our children will be travelling when we are gone.

A highly significant recent development has been the establishment of minimum educational standards for the adequate training of clinical specialists and the creation of examining boards in most specialties. The public is confused by the large number of physicians who claim to be specialists. There is evidence that there are not enough well qualified specialists to satisfy the public need.⁹ When public registries of qualified specialists are created, much of the present confusion will disappear. Universities, medical schools and hospitals are responsible for the organization and administration of educational programs in this field and the extent to which they accept the challenge of this obligation will influence the quality of medical service of the future. Less than 3 per cent of the total annual budget of more than eleven million dollars for the medical schools of the United States is available for graduate medical education. More financial support will have to be secured if graduate instruction is to be placed on a proper University basis.⁹ There is no avoiding the fact that high grade medical education is expensive. Universities cannot be satisfied with anything less than the best grade.

Another problem which has developed because of the phenomenal growth in medical science is that of keeping abreast of progress—of closing the gap between what is known and what is applied. It is generally recognized that medical education is a process which continues throughout the professional career of the doctor.³ A variety of programs have developed to help the physician keep up-to-date. They vary in detail and administration but are similar in objective. Prominent in this field of education are medical societies, medical publishing houses, public health administrations, medical schools, hospitals, educational foundations, alumni associations, notably the alumni association of Wayne University College of Medicine, and University extension administrations. In promoting such programs the profession has been well

abreast of progressive thought on adult education. It is praiseworthy that among the professions medicine is first in bettering the quality of its service by improving the proficiency of its members, an inheritance in educational ethics which has come down to us from Hippocrates.

Time does not permit elaboration of the effect of these trends upon the internship, residencies and fellowships in the clinical specialties. That the internship, and therefore the hospital, is in a pivotal position in the whole program of medical education there is general agreement.⁶ There is more appreciation of the fact also that there is need for greater emphasis on educational aspects of the hospital experience and for a re-organization of the internship in terms of the larger social objectives in medical education. It is quite clear that opportunities for training in general surgery and in surgical specialties should be limited to graduate students. The internship should be chiefly medical with emphasis on general medicine, including pediatrics, surgical diagnosis, normal obstetrics and gynecology, preventive medicine and public health.

There is a "common ground upon which the patient, the community and the professional groups meet"⁵ which appears to offer excellent prospect of solving many of the problems of medical education and medical service. This is the hospital. "It evidently occupies a strategic mid-position and has open to it a great opportunity and a corresponding obligation—as a coördinator of activities—professional, economic and social in their application upon the problems of public health."⁵ The hospital is the community health center wherein the professional personnel receives its clinical training, renders its most difficult, complicated and expensive service and continues most of its education.

In our many activities we cannot fail to learn more about people and how better we can live together in an increasingly complex world and find happiness. If we are sufficiently thoughtful and humble we may develop a technic of living and of service which will be useful to the larger welfare of society. The immediate challenge is to

develop disinterested, statesmanlike leadership in the profession which, within the framework of government of a still free and liberty-loving people, can solve the problems of medical service. The physician knows that "society is an association of living persons and not an arrangement of inanimate materials."⁷ In our attack on the problems of healthful living we should cherish the essence of our faith as physicians, which cannot be better stated than with the words of Walter Lippman,⁷ "to regard ourselves not as the creators, designers and dictators of the nature of man, but as the servants and allies of nature."

We in Detroit are particularly fortunate in having a large number of excellent hospitals and leadership which is broad-visioned, progressive and courageous in dealing with the manifold problems of our day. The organization of a medical school in a University which is responsible to the people through the Board of Education guarantees that we shall not lose sight of the fact that the ultimate test of usefulness of any institution is: "Does it serve the best interest of the people"?

1512 St. Antoine Street, Detroit.

There is nothing here which will be unfamiliar to Drs. Hugh Cabot, Willard C. Rappleye, Richard E. Scammon and James P. Warbasse, to whom the writer is indebted on this and many other occasions.

References

1. Cabot, Hugh: *The Doctor's Bill*. With an introduction by A. Lawrence Lowell. Columbia University Press, New York, 1935.
2. Cabot, Hugh: Personal communication.
3. Commission on Medical Education: *Final Report*. Columbia University Press, New York, 1932.
4. Committee on the Costs of Medical Care; *Medical Care for the American People*. University of Chicago Press, Chicago, 1932.
5. Committee on the Training of Hospital Executives, 1922. Quoted by W. C. Rappleye in pamphlet on "The Real Economic Problem of Medical Care," January, 1936.
6. Curran, J. A.: *Function of the Hospital in the Training of Internes and Residents*. *Jour. A. M. A.*, 106: 753-756, (March 7) 1936.
7. Lippman, Walter: *Planned Society*. Address at the New York Academy of Medicine. *New York Herald-Tribune*, December 20, 1935, pp. 25.
8. Morrissey, John H.: *Chairman's Address*. Section on Urology, *A. M. A.*, May 14, 1936. New York. Unpublished.
9. Rappleye, Willard C.: *Current Trends in Graduate Medical Education*. *Jour. Assoc. Amer. Med. Coll.*, April, 1935.
10. Sproul, Robert G.: *Medical Education and Its Relation to Society as a Whole*. *Proceedings of the Annual Congress on Medical Education, Licensure and Hospitals*, Chicago, February 12 and 13, 1934.
11. Warbasse, James P.: *The Doctor and the Public*. Paul B. Hoeber, Inc., New York, 1935.

THE TREATMENT OF ABORTION

An Analysis of 646 Cases

C. R. DAVIS, M.D., A.B., F.A.C.S.†

DETROIT, MICHIGAN

There are two types of treatment for abortion, the conservative and the radical. By conservative treatment I mean cases treated without curettage, and by radical treatment I mean cases treated by curettage. It is rather difficult to decide which form of treatment is best because both forms have earnest advocates, and most statistics give mortality rates in general and do not classify them according to the treatment used. C. Jeff Miller³ in Lewis's Practice of Surgery states "the estimated mortality for neglected puerperal infections is roughly 10 per cent"; which figures agree with those of Riddell.⁴ Miller quotes Gordon as having had 530 cases of abortion, one-sixth of which were definitely septic, with seven deaths. Dr. Fred J. Taussig⁶ says that "the average maternal death rate following abortion for the civilized world is 2.1 per cent." He further stated that in Magdeburg from 1924 to 1927, a period of four years, there were 6,497 abortions with sixty-one maternal deaths from sepsis, a ratio of 9.4 per 1,000 abortions due to sepsis, and in Switzerland, during thirty years, deaths from abortion exceeded 20 to 1,000. Figures such as those of Schottelius in Hamburg, with 183 deaths out of 8,107 abortions or 2.1 per cent, and Benthin of 1.9 per cent, Dr. Taussig considered insufficient and too low. Schaefer from Berlin cited 6,270 abortions with 3.25 per cent mortality. Bleichroeder reported a rate of 3.36 per cent, Kiefer a rate of 4 per cent and Dietrich a rate of 4.5 per cent. Dr. Harold C. Mack² quoted death rates from abortion treated at Harper Hospital in Detroit as two in ninety-six therapeutic abortions, one in 950 abortions, and twelve in 203 criminal abortions, a rate of 1 per cent for the entire group. Dr. Basil L. Connelly¹ reported a mortality of 2.5 per cent in a series of 1,000 cases treated by different methods. The figures so far quoted show that the mortality for abortions have averaged from 1 to 4 per cent with the various types of treatment, so that anything below 1 per cent is low and anything above 4 per cent is high.

Now as to conservative treatment, C. Jeff Miller, who favored this type of treatment, cited a mortality record of four deaths in 299 abortions in which 44 per cent were

septic. One of these patients was moribund and died within five hours after admission. Not counting that death, the remaining three deaths made his mortality rate just over 1 per cent. Miller and other advocates of the conservative type of treatment disapprove of radical treatment because they believe that it disturbs nature's protective layer of thrombosis at the placental site and the leukocytic infiltration that underlies the surface necrosis. I would like to know "how are we to know" that statements about nature's protective layer are true, if it is true that French surgeons cannot determine when bacteria have penetrated beyond the reach of the curette, as Miller claims in his attack upon their belief that curettage should be done "before the bacteria have penetrated so deeply as to be out of reach of the curette." I do not intend to try to settle the controversy, but if the penetration of bacteria and the formation of the protective layer of thrombosis and leukocytic infiltration take place at the same time, the French surgeons may be correct in advocating early curettage. If the penetration of bacteria occurs before the protective layer has formed, the French still are correct. If, however, the penetration of the bacteria occurs after the protective layer has formed, Miller might be correct. My discussion, however, concerns results with the two types of treatment and not the reasons for their uses.

My first experiences with abortions were with conservative treatment, either doing nothing, or bluntly cleaning the uterus with the finger or gauze, or using douches only. A ward clogged with these patients made a profound and lasting impression on me. Conservative treatment not only appeared futile, but the hospitalization time was long and the death rate appalling.

†Dr. C. R. Davis is a graduate of Ouachita College, Arkansas, A.B.; Cornell University, New York City, M.D., in 1908. He served as interne and house surgeon at the Presbyterian Hospital, New York City. He is Attending Surgeon, Grace Hospital, Miriam Memorial Branch; Chief of Surgical Staff of Parkside Hospital, and Advisory Consultant to the Out-Patient Department of Grace Hospital.

After six months work with conservative treatment, I served on the Surgical Service where I was permitted to see cases treated by the radical method. It was Clarence McWilliams whom I first saw curette a uterus following a septic abortion and pack it with gauze saturated with alcohol. The results with radical treatment were so brilliant in contrast with the conservative treatment that I decided then and there that I should ever afterwards use the sharp curette and alcohol gauze pack, a treatment which I have not varied since, except occasionally to pack with iodoform or mercurochrome gauze. In early private practice I frequently delayed the operation for a day, or two, or three without good reason, but soon discontinued the practice because of severe hemorrhages which occurred and prolonged sicknesses which frequently followed and caused me much hard work and many worries. For years now I have curetted all cases of abortion at once regardless of time, place, or conditions, a procedure I have had no cause to regret, because recoveries have been prompt, and the after-care has been easy and simple. When I have seen trouble after curettage, it has occurred because the uterus had not been thoroughly cleaned, and here I shall concede a point: if a surgeon cannot clean a uterus thoroughly he had better use conservative treatment. A thoroughly cleaned uterus, which can be done well only with a sharp curette, followed by the sterile stimulating antiseptic alcohol pack (50 per cent alcohol preferred), which also controls hemorrhage, has prevented a high mortality in my practice. As to tearing holes in the uterus, an argument often used against the sharp curette, holes are poked in and not torn in and can be poked as easily with a dull curette as with a sharp curette.

Many of my colleagues curette and pack the uterus, and their results are good. Dr. Basil L. Connelly found a lower mortality with radical treatment than with conservative treatment. Dr. Wilfred Shaw⁵ states that the tendency in Germany and America is to treat septic abortion expectantly, but his experience has been that salpingitis and tubo-ovarian abscesses have developed more frequently after conservative treatment than after immediate evacuation of the uterus. He thinks that the mortality is lower with expectant treatment, but gives no definite figures to support his belief.

Now, as to my own results, I shall review the last 646 curettages which I have done. In 646 curettages, 539 have been on post-abortions or post-obstetrical cases. There were no selected cases in this group. They were taken as they came, whether clean or septic, and whether in the home or in the hospital, and nearly all of them were referred cases. As stated before, the curettages were done at once, and the uterus was packed with a strip of gauze saturated with alcohol. The gauze pack generally was removed on the day following the operation. Of 137 cases curetted in the hospital, many patients had had chills; 104 had a temperature, some over 104°, with pulses as high as 150. Ninety-two went home before the third day. I seldom recorded the temperature of patients treated at home. If they had had an incomplete abortion, I did a curettage regardless of temperature, pulse, or hemorrhage.

The complications were:

Peritonitis	5
Septic pneumonia	1
Pneumonia	1
Pyosalpinx later	5
Pelvic abscess	1
Abscess in the broad ligament.....	1
Perforated uterus (this patient lived)...	1

The mortality for all post-abortions during the period of time that I did the 646 curettages was four and for post-obstetrical infection was none; only one case was treated conservatively and that patient died within twelve hours. One of three patients who died when treated by curettage died within twelve hours also. A second patient died in twenty-four hours, and a third lived eight days. All four deaths resulted from peritonitis. Thus the mortality rates are:

	No. of Cases	Deaths	Mortality Rates
Curettages all cases.....	646	3	.46 %
Abortions treated radically.	538	3	.557 %
Abortions treated conservatively	1	1	100.00 %

In conclusion my experience with radical treatment shows that it has resulted in quick and easy cures and a low mortality rate.

References

1. Connelly, Basil L.: The treatment of abortions. *Jour. M. S. M. S.*, 28:623-625, (September) 1929.
2. Mack, Harold C.: Preventative medicine and abortion. *Med. Jour and Record*, 135: (Jan.-June) 1932.
3. Miller, C. Jeff: *Lewis's Practice of Surgery*. 10: (Chapter 7) 22-34.
4. Riddell, Lord: Abortion and maternal mortality. *Jour. Obst. and Gyn., British Empire*, 38:1, 1931.
5. Shaw, Wilfred: The management of cases of abortion. *The Practitioner*, p. 129 and 378-389, (September) 1932.
6. Taussig, Fred J.: Abortion in relation to fetal and maternal welfare. *Am. Jour. Obst. and Gyn.*, 22: (July-Dec.) 1931.

TENOSYNOVITIS*

JAMES A. SPENCER, M.D.†

FLINT, MICHIGAN

A brief glance into the historical past indicates that though Aristotle and Herophilus (300 B. C.) knew of lymphatic and chyloferous vessels, the subject didn't receive much light until Nicolas Masse discovered renal lymphatics in 1532. Knowledge of inflammatory processes of course followed such discoveries as this.

John Hunter, the great founder of surgical pathology, in the early 18th century, pioneered investigations into tissue transplantation surgery and told us much of the nature of inflammation.

During the latter half of the 19th century, discussions arose over the subject of lymphatic versus synovial sheath extension in inflammation which had become infected. We know now, of course, that infections travel by either channel.

In later years such men as Helferich and Forssell brought before the profession the method of opening wide the sheaths of infected tenosynovitis. Probably no single contributor in this more recent period, although he differs with some of Forssell's methods, has given us any more valuable or thorough information on the subject of tenosynovitis than has Allen Kanavel.⁶

I shall refer freely to the work of Kanavel in this paper and also to interesting and helpful material from the literature, by such men as Frederick Cristopher,⁵ Koch,⁷ Sterling Bunell,⁴ and others.

Tenosynovitis—the inflammation involving tendon sheaths—may be traumatic or infectious. The infectious comprises the suppurative, gonorrheal, tuberculous, syphilitic, and gouty or rheumatic types.

Traumatic Tenosynovitis

Etiology.—This form occasionally results from a single injury, but usually is caused by repeated and excessive use of a wrist or some part unaccustomed to such activity, such as a metal finisher's constant rubbing of metal with a file, hammering, rowing or tennis. Overuse of a shoulder joint may cause a traumatic tenosynovitis of the tendon of the long head of the biceps. Bicycling, hiking or the chafing of a shoe may affect the Achilles tendon or peroneals.

*Presented at staff meeting, Hurley Hospital, Flint, Mich., February 2, 1936.

†Dr. Spencer graduated from the University of Michigan Medical School in 1931. He served rotating internship at Hurley Hospital, Flint, Michigan, in 1931-1932. From 1933 to 1935 he was in Medical Divisions of Fisher Body Corporation in Flint, and Cleveland, Ohio. He is now on the staff of Hurley Hospital in Flint, Mich., where he is located in general practice.

The use of tin-shears or peeling fruit may inflame dorsal extensor tendons.

Pathology.—It must not be forgotten that traumatic tenosynovitis is a simple inflammatory process involving the synovia and structures, there being no infection unless the process becomes complicated by invasion of organisms. Inflammation, according to Adami¹ "is the local attempt at repair of injury." There is the usual swelling of the sheaths due to accumulations of exudates in the tissues. Redness and heat occur due to hyperemia of the overused membranes. There is evidenced pain because of pressure on nerves, function is impaired and connective tissue cells may undergo albuminous or fatty degenerative changes, yielding eventually small islets of lymphoid tissue, which become hyperplastic and further add to the roughening of the normally smooth sliding mechanisms. These conditions produce the well-known sensation of crepitus, felt over a tenosynovitis of the wrist.

Diagnosis.—The synovia are red and external swelling may be present, according to the intensity of the process. This swelling is limited at the annular ligament, whether at the foot or wrist. Local tenderness and pain on movement are complained of by the patient, who also usually states that he feels a creaking or rubbing when he moves the affected part. This crepitus, palpated by the examiner during performance of motion, is the chief diagnostic sign.

Treatment.—Removal of the cause is indicated, i.e., absolute rest of the part by splinting until all symptoms on active motion, and crepitus have subsided. Recovery will be hastened by daily hot fomentations or soaks; heat in the form of diathermy, paraffin baths, infra-red or the electric pad may be used instead. My personal experi-

ence with a considerable number of cases in industry has led me to believe that hot soaks are about as satisfactory if one is going to use heat. Simple splinting, in many cases, has produced satisfactory results. Some advocate the use of mild local counter-irritants, and various liniments to be added.

In industry, men being treated for this condition are usually given light work until the process clears up. Some use a counter-irritant and a firm gauze dressing with no other splinting material and keep the men at regular work with good results. Care must be exercised here not to immobilize long enough to allow the formation of extensive adhesions. Bunell⁴ states that ossification following simple trauma, in such tendons as Achilles, triceps and quadriceps similar to myositis ossificans fibrosa, has been reported.

It may be interesting to note that, although not true in Michigan, traumatic tenosynovitis is ruled a compensable disease by Ohio and some other States' compensation laws.

Infectious—Suppurative Tenosynovitis

Etiology.—This form is best exemplified in the hand and forearm. It occurs as the result of the introduction of organisms, generally the staphylococcus—although the streptococcus causes a very rapidly forming infection, the sheath may become distended in six hours, with great pain resulting. There may be history of simple trauma, but usually the patient shows evidence of a previous wound, when tenosynovitis occurs following either direct extension or by lymphatic route from neighboring parts. Puncture or stab wounds are the commonest offenders, causing direct introduction of organisms into the sheath. Can openers, nails and sharp pointed knives, even a too deeply placed incision of a superficial abscess by the surgeon's knife, may eventuate in a tenosynovitis.

There is also that rather disturbing tenosynovitis in which the patient gives absolutely no history of trauma; this type I have seen even in industry, where one usually gets a history of injury or at least sees the evidence in a small recently closed wound.

It is rather uncommon, says Kanavel,⁶ for a felon, unaided by an ill-advised incision, to give rise to a tenosynovitis. This is also true of suppurative arthritis of a dis-

tal interphalangeal or metacarpophalangeal joint, because of anatomical conditions. Wounds of the dorsal surface of the hand do not cause palmar-sheath infections, because of the direction of lymphatic flow from the palmar to dorsal surface.

Rapid changes take place in the acutely inflamed tendon sheath. Some compare the effects to a pressure necrosis, due to edema causing ischemia, or from toxicity of a virulent infection. Where pressure is great, as under the annular ligament in a wrist, necrosis of sheath, tendons or even the median nerve may exist. In other areas the wall of the sac is edematous and congested. The synovial wall may be semincretic, simply cloudy with whitish yellow spots, or unchanged and clear. In spite of the damage which often appears to have been done, it is surprising the reparative results one gets in properly drained cases.

The serum in the sac may be scanty and only slightly tinted or may be copious slimy fluid or thick pus. In opening some of the more acute varieties rupture of the sheath may have occurred, so that the thick creamy pus, instead of issuing from the incision, may not be found without entering the fascial space into which it has ruptured.

The tendons, although they may be swollen, retain their glistening synovial covering for some time. Where pressure is great—under ligaments, they may be pale and compressed. Later, of course, they will become necrotic, extruded, grayish strings.

Most extensive and persistent changes occur in an involved finger when neglected, and after the acute process has subsided. Inflammatory exudates may persist for weeks followed by atrophy of the entire finger, ankylosis of joints and impaired nerve function. Even though the tendon is not destroyed, adhesions between it and the sac make a good functional prognosis almost hopeless in neglected cases.

The characteristic result of severe ulnar bursa involvement is a claw hand.

Diagnosis.—To avoid severe complications which always result from delayed treatment, it is imperative to make an early diagnosis of tendon sheath involvement. Kanavel⁶ states that "it is one of the most difficult problems in surgery; and yet withal one of the most important."

Three cardinal diagnostic criteria—again according to Kanavel⁶—are: (a) exquisite

tenderness over the *course of the sheath*, and limited to the sheath; (b) flexion of the fingers with *symmetrical* enlargement; (c) *excruciating* pain on extending the finger (or even on passive motion by the examiner), most marked at the proximal end.

These facts well-remembered will usually enable one to establish the diagnosis, even though most differ only in degree from symptoms of any infection of the hand.

A point to note here is that the flexion, of the involved plus the adjacent fingers, is present due to arthritis, irritation of adjacent median or ulnar nerve filaments and to lessen the tension upon the tendon. There is, however, a difference between the simple flexion of the adjacent swollen fingers and the rigid flexion of the infected one.

A felon may be differentiated here by its swelling at the distal portion rather than symmetrical enlargement of the whole finger as in tenosynovitis.

A radial bursa infection may simulate a thenar space abscess, even though this space puffs up the tissues on the dorsal surface in the web between the thumb and index metacarpals. By carefully applying the above mentioned cardinal signs, noting particularly the pain on movement of the tendon and tenderness over the sheath one will not make the mistake of incising in the wrong place.

Infections of the dorsal sheaths present the same findings except that the tumefaction is about twice the length of the sheaths.

In order to more intelligently understand the condition present, particularly in hand infections, the table should be consulted, showing possible extensions from various sheaths if rupture occurs. Kanavel injected the tendon sheaths from the hands of a large number of cadavers, with a visible injection mass, under different pressures, and traced extensions of these masses. The results were quite constant and are summarized in the outline shown.

Treatment.—In early cases when the diagnosis is in doubt, when a finger has become infected, much may be done to prevent a spread into the sheath. This is especially true of the staphylococcic, more localized, slow spreading variety. Keeping the part at rest, coupled with the use of hot saturated boric acid or magnesium sulphate fomentations is probably the best of such prophylactic treatment. Carbolic solutions are not recommended as they may produce gan-

TABLE I. POSSIBLE EXTENSIONS OF INFECTIONS FROM VARIOUS SHEATHS
(AFTER KANAVAL)

Site of Original Infection	Possible Extension
1. Thumb	In most cases pus ruptures from sheath of flexor longus pollicis into the forearm. Rarely invades thenar space. May involve dorsal subcutaneous tissue. By synovial sheath extension to the thenar space.
2. Index finger...	Subcutaneous tissues of dorsum of hand. Rarely middle palmar or thenar spaces (fascial-space extension). By synovial sheath extension to the thenar space.
3. Middle finger..	Synovial-sheath extension to the mid-palmar space exceptionally to the thenar space.
4. Ring finger....	Synovial sheath extension to middle palmar space.
5. Little finger...	By tendon sheath extension to mid-palmar space, or if continuous with ulnar bursa, to the forearm.

grene. Painting with iodine has been labeled a useless procedure by Kanavel⁶ and others.

After the diagnosis of sheath infection is made, the treatment is wide incision, opening wide the tendon sheath along all parts involved by the abscess. In this regard Auchincloss² states that it is far better to open a few tendon sheaths too early than one too late; he also quotes Sir W. R. Gowers as saying "decisive hesitation is far wiser than hesitating decision." The common error, however, is on the side of conservatism in this type of case. If accurate diagnosis of tenosynovitis is made, operation promptly done will save the function of many hands. I have had opportunities enough to apply these methods of treatment that I thoroughly believe in their usefulness.

In general it may be said that incision should be made *laterally*, on one or both sides for cross drainage. Operation should be done under general anesthesia, preferably in a hospital, in a field rendered bloodless by using a blood pressure tourniquet.

The incision must be adequate—a wound well opened and draining heals more rapidly than one too small. I usually open the sheath first at the known point of infection, and try to keep my incision from crossing the articulations. If there is seen to be much edema of the cut sheath which might close the incision, the sheath is opened wide. A grooved retractor may be used to guide the knife, preventing damage

to the tendon, when using a long incision to open extensions into the hand.

If the prolongation of the sheath into the forearm is involved, incision is made 2.5 inches long, beginning 1.5 inches above the tip of the ulna, directly down onto the bone at its flexor surface. Forceps may be pushed through under the flexors across the floor of the space (pronator quadratus muscle). In large abscesses a connecting incision on the other side may be made, this, however, is not commonly necessary. The finger may now be thrust into the space under flexor tendons, nerves and vessels, and the bulging sheath palpated and incised. The forceps can now be made to pass under the annular ligament and out into the palmar opening of the bursa. Kanavel⁶ uses this incision for drainage of the upper end of the bursa, even though it hasn't ruptured into the forearm.

In opening the long palmar extension of the thumb sheath, the tendon lies nearer the palm than one might think; the mass of the thenar muscle is radial to it. The incision should stop a thumb's breadth from the annular ligament to avoid injury of the motor nerve of the thenar muscles.

It is only in rare cases of necrosis of tendons or superficial involvement above the wrist that a flexor incision should be made—it should then be done carefully by layers. If the annular ligament has to be cut, stay as far ulnarward as possible. Remove severely damaged tendons in late cases before they become jeopardizing foreign bodies.

Drains are rarely necessary. Especially should rubber drains be kept out from under the annular ligament. They should not pass across a tendon. Koch⁷ says that "the use of through-and-through drainage above or underneath a flexor tendon . . . is the surest method of causing necrosis of tendons." Gauze plugs up the wound and interferes with drainage. Bunell⁴ uses small gauze strips impregnated with ammoniated mercury, to keep the margins of the wound open. If there is not too much venous oozing 0.5 per cent solution of sodium citrate saturated gauze may be used just at the margins, to aid drainage by preventing coagulation of lymph. The use of boric or magnesium sulphate fomentations for a few days, only until the process is under control, will facilitate drainage. They should be

discontinued as soon as possible, as they favor congestion and round-cell infiltration, giving a slow healing soggy hand.

The hand is dressed in extension on a dorsal splint if the sheaths have been opened wide, so that the tendons will not prolapse. Then in a few days a well padded palmar splint will be comfortable, keeping the part at rest and in the position of grasping, hand dorsi-flexed on wrist with fingers semi-flexed, to prevent a drop-wrist and weak hand resulting. Dressings should be changed twice daily at first.

As the purulent drainage diminishes, sometimes as soon as 48 hours after the incisions, passive and slight active movements may be cautiously instituted. This should be done in a hot sterile bath with gloved hands, using care not to be vigorous enough to disturb the patient's general reaction.

As soon as moist dressings have been discontinued, the hand may be baked under a sixty-watt electric light bulb for three hours each day at the dressing changes. Sometimes in cases which have become too congested, dressings saturated with equal parts alcohol and glycerin for a few days will aid in the dehydration of the part.

Healing usually will be well near completion around the end of the second week. Further physiotherapy here is not only good practice, but is many times distinctly necessary to establish a good return to function. I have used massage preceded by radiant heat and hydrotherapy to increase motion and prevent adhesions, besides the electric light (to control infection) mentioned above, and have obtained gratifying results. Exercise, occupational therapy and psychotherapy all have their places in restoring function to as near a normal state as possible.

Gonorrheal Tenosynovitis

This form, though not as common, may occur with or without gonorrheal arthritis. The etiology, of course, is the gonococcus. A positive gonorrheal complement fixation reaction in the blood is usually present, as is also evidence of a primary gonococcal focus, i.e., urethritis, or prostatitis.

Pathologically the process consists of edema, swelling, pain and infiltration of the sheath, or one may see a purulent form simulating and running the course of the

pyogenic type. The tendons of the forearm about the wrist and occasionally about the ankle are the common sites of involvement.

Diagnosis is established by obtaining a history of recent urethritis, finding the gonococcus, demonstrating a positive gonorrheal complement fixation test in the blood, and eliciting the usual signs of tenosynovitis. Zadek⁸ of New York demonstrated organisms in the tissues in a tenosynovitis of the long head of the biceps. Birnbaum and Callander,³ however, state that immediate bacteriological examination of the discharges or sheath contents is usually imperative to prove the presence of gonococci. Direct smear is useless even after twenty-four hours, but a positive culture may be obtained up to a very few days.

Treatment consists of rest, splinting, elevation, moderate pressure, heat and treatment of the gonorrheal focus. Later, light massage and cautious passive motion is instituted to prevent adhesions. In most cases the pyogenic form has to be drained. This is done according to the methods outlined above.

Syphilitic Tenosynovitis

The syphilitic variety of sheath infection occurs, though rather infrequently, in early syphilis or even more rarely as a gummatous or serous form in late lues. A hydrops or swollen gumma mass may be present over the course of the sheath, and along with a positive Wassermann and absence of general severe reaction helps establish the diagnosis. The condition responds very readily to anti-syphilitic treatment. Local measures rarely have to be used, beyond symptomatic relief.

Tuberculous Tenosynovitis

Bunell⁴ gives a very compact and clear cut picture of this condition. Tuberculosis tenosynovitis may exist as the primary or as part of a more generalized infection. The sheaths of the flexor and often of the extensor tendons of the wrist, the peroneals or occasionally the extensors and flexors in the foot may become involved with the tuberculosis infection. It is usually found in young adults.

The pathology is interesting. The sheath becomes thickened with tubercles and granules in its parietal layer, and with edema. Soon the linings of the sheath become coated

with fibrin formed in lamellae about loose detritus, giving the so-called "rice bodies." In more advanced cases the sheaths become swollen to a soft sausage-like fungoid consistency. On opening these thickened sheaths the tendons, though lusterless and grey, are in good condition. Later, however, they fragment and fuse into the general yellowish mass. Nerves are usually not tuberculous. Fibrous solidification may occur, but usually caseation with sinus formation and drainage takes place.

The diagnosis may be established by noting the presence of tuberculosis elsewhere, plus evidence of symptoms and signs of local inflammation and swelling along the sheaths. The process may come on gradually or suddenly after trauma. Only in the early stages can crepitations be felt. The swelling may be at first elongated, enlarging over a course of several years, with slight pain and limitation of motion. If the median nerve becomes involved, pain becomes severe and burning. Most of the severe pain disappears in the advanced process, however. Rice bodies may be felt by the palpating hand as the tendons are moved.

Treatment in early cases, or those with active pulmonary involvement, is incision and evacuation of the sheaths plus introduction of 5 per cent iodoform in glycerin, which is put in before closing the incision. This is followed by long immobilization by splinting. The more radical method in later cases, but a good one in regard to promptness of cure and eradication of the disease, is complete careful excision of all of the tuberculous infected tissue. The incisions here should extend the length of the involved parts, which should be excised and tenorrhaphy done of the healthy ends.

If the process is far advanced enough to involve the bones and joints, amputation may be necessary.

Along with the above procedures one must not forget to treat any remaining or coexisting tuberculosis.

Rheumatic Tenosynovitis

This form is rare. It may or may not accompany rheumatic arthritis. Pathologically it is a complication of the so-called "rheumatic state"—and may occur any time in the disease. This rheumatic state is now considered to be caused by hemolytic strains

of the streptococcus in most cases, and is, like syphilis primarily a vascular disturbance. This, of course, explains its variable complications.

Rheumatic tenosynovitis can, of course, be diagnosed by applying the principles outlined above. There probably will also be some concurrent sign of rheumatic fever, i.e., chorea, arthritis, or rheumatic heart.

Treatment, besides rest, salicylates and

general measures, may include incision and drainage according to the methods outlined above.

Bibliography

1. Adami: *Albutt's System of Medicine*, 1905, p. 702.
2. Auchincloss: *Christopher's Minor Surgery*, p. 472.
3. Birnbaum, Walter, and Callender, C. Latimer: *Jour. A. M. A.*, 105:1026, 1935.
4. Bunell, Sterling: *Lewis's Practice of Surgery*. Vol. 3, Ch. 4.
5. Cristopher, Fredrich: *Minor Surgery*.
6. Kanavel, Allen: *Infections of the Hand*.
7. Koch: *Quotes from Minor Surgery*.
8. Zadek (New York): *Jour. A. M. A.*, 104:2176, 1935.

TONSILLECTOMY

E. WALLACE TEED, M.D.†

ANN ARBOR, MICHIGAN

The technic of tonsil surgery has undergone gradual modification during the past fifty years. From 1880 to 1910, the literature was filled with controversies over the question of tonsillectomy versus tonsillotomy, and, in this country at least, little has been heard of the subject in recent years. It is evidently a live subject abroad, however, since Lind¹⁶ published an article on it during 1935. His conclusion, in agreement with the general opinion here, was that tonsillectomy was indicated if surgery were advisable at all.

The indications for operation, however, have been generally widened during this period, with the result that a wholesale tonsil slaughter has taken place. School nurses and charitable organizations have taken up the charge, and herded children into hospitals for operation, merely because the tonsils were thought to be "enlarged." Many general practitioners have seen in the operation an easy way to round out an income, and have continued the onslaught. I will not say that this large-scale surgery has been without beneficial results, but I do believe that it has cost the profession the loss of considerable prestige.

My feeling is that the tonsils should not be removed except for cause. Certainly no one would remove an appendix simply because it was present. The decision for removal should be made only after a fair trial has been held. In this trial, the tonsil is the defendant, the patient, or his parents, the plaintiff, and the surgeon is the judge. If evidence is shown that the defendant has been guilty of certain wrong-doing, the Judge may rightly decide against him. If, on the other hand, no evidence can be adduced against him, acquittal is in order. The appearance of the tonsil at any one time is no more evidence than the appearance

of the criminal on the stand. He can be condemned only on the basis of past performance. I am in complete accord with Layton,^{11, 12} that mere size is not an indication for removal, and that a period of time may be necessary in which to observe the patient and reach a conclusion.

The common practice of removing tonsils and adenoids together has led many to believe that this should always be done. This is not the case, since separate indications exist. In early infancy, for example, adenoids may obstruct breathing to such a degree that normal sucking is hampered, and nutrition is disturbed. In these cases, adenotomy is indicated, and the tonsils may be left alone, as Love,¹⁷ Neumann,¹⁸ Cechmach⁵ and others have pointed out.

The basic indications for tonsillectomy are repeated sore throats, enlarged cervical glands, peritonsillar abscess, and metastatic infections such as endocarditis, arthritis, chorea, etc., which are believed to originate in the tonsil. Lierle and Potter¹³ believe that tonsillectomy in diabetic children results in a definite increase in sugar tolerance. Darrow⁷ advises operation in the treatment of chronic ulcerative colitis. Werner²⁷ advocates tonsillectomy for disinfection of the throat in diphtheria carriers, and Pilot and

†Dr. Teed graduated from the University of Michigan Medical School in 1927. He practiced at Owosso, Michigan, until 1932, when he accepted an appointment in the Otolaryngological Department at the University of Iowa Medical School. He located in Ann Arbor in 1934. His practice is limited to ear, nose and throat.

Davis²² for the same in carriers of streptococci. Brown,³ Topper and Leader,²⁶ and Zsindely³³ believed that removal of tonsils reduced the incidence of diphtheria, and produced a negative Shick reaction in many cases, but Orosz and Kugler²¹ could not corroborate this. Zsindely³³ and Kaiser⁹ held that it also had a favorable effect on the incidence of scarlet fever, but Kereszturi and Park,¹⁰ and Nordwall,¹⁹ noted no such effect. Kaiser⁹ pointed out that the operation influenced unfavorably the incidence of bronchitis, pneumonia, and sinusitis.

Tonsillectomy for peritonsillar abscess during the acute stage has been advocated stoutly by foreign authors, such as Linck,^{14, 15} Claus,⁶ Taptas,²⁵ Zambrini and Podesta,³⁰ and others, but little encouragement has been received in this country. Bruns⁴ argued against it, and Zöllner^{31, 32} reported several cases of sepsis following such procedure.

Electrocoagulation has had a popular appeal during the past few years because of its alleged painlessness, bloodlessness, and freedom from loss of time. Yonker²⁹ pointed out that none of these premises were true, and Shambaugh, Dougherty and Yonker²³ doubted if there were any real indications for the method. Certainly, very few qualified surgeons believe that it has replaced clean surgical excision as a routine procedure. Novak,²⁰ Andrews,¹ and others, have pointed out that there is a real danger of sealing infection in the crypts by diathermy. However, Wood²⁸ believes that in the tuberculous, with recurrent suppurative tonsillitis, electrocoagulation is indicated. Halle⁸ holds that the only indication is hemophilia.

The high-pressure sales methods of manufacturing concerns have induced many unqualified persons to purchase equipment, and to practice the method, on the assumption that it was easy, safe, and lucrative. Skillern²⁴ and Barlow² have pointed out that the dangers are in direct ratio to the lack of knowledge and experience, and hold that no one should attempt the method unless thoroughly qualified along surgical lines.

Roentgenotherapy has been advocated by some, but there is insufficient evidence at present to believe that it will replace surgery.

In conclusion, it would appear that the profession has an opportunity to increase its prestige by insisting that needless surgery

of the throat be curtailed, and that the work that is done be limited to those adequately qualified. School nurses and others should be instructed in the indications for tonsillectomy, and warned against prescribing operation before medical examination has been made. It should be kept in mind that electrosurgery and other methods are still in the experimental stage, and that no final conclusion is possible at this time. However, their use in untrained hands is deprecated.

410 Highland Rd.

Bibliography

- Andrews, A. H.; Discussion on paper by Yonker.²⁹
- Barlow, R. A.: Pitfalls in tonsil coagulation. *Arch. Phys. Therap.*, 13:598, (Oct.) 1932.
- Brown, R. G.: The relation of diphtheria and diphtheria carriers and mastoid disease to tonsils and adenoids. *Jour. Laryng. & Otol.*, 47:673, (Oct.) 1932.
- Bruns, O.: Die Chronische Tonsillitis und ihre Folgekrankheiten vom Standpunkt des internisten. *Deutsche Med. Wchnschr.*, 56:2163, (Dec. 19) 1930.
- Cemach, A. I.: Zur Frage der Indikation der Tonsillektomie im Kindesalter. *Statistischer Beitrag. Monatsschr. f. Ohrenh.*, 66:1453, (Dec.) 1932.
- Claus, H.: Sepsis nach Angina. *Ztschr. f. Laryng., Rhin., Otol.*, 23:58, 1932.
- Darrow, C. H.: Otolaryngological treatment of chronic ulcerative colitis. *Ann. Otol., Rhin., & Laryng.*, 40:565, (June) 1931.
- Halle: Chirurgische Entfernung oder Elektrocoagulation der Gaumenmandeln? *Arch. f. Ohren-Nasen-u. Kehlkopf.*, 135:364, 1933.
- Kaiser, A. D.: The relation of tonsils and adenoids to infections in children. Based on a control study of 4,400 children over a 10-year period. *Am. Jour. Dis. Child.*, 41:568, (Mar.) 1931.
- Kereszturi, C., and Park, W. H.: Effect of tonsillectomy on the development of immunity to scarlet fever as shown by Dick test. *Jour. A. M. A.*, 107, 764, (Sept. 12) 1933.
- Layton, T. B.: Treatment of Enlarged Tonsils in Children. *Lancet*, 1:509, (Mar. 11) 1933.
- Layton, T. B.: What can we do to diminish the number of tonsil operations? *Lancet*, 1:117, (Jan. 20) 1934.
- Lierle, D. M., and Potter, J. J.: The rôle of chronic and of subacute infections in diabetic children. *Arch. Otolaryng.*, 14:432, (Oct.) 1931.
- Linck, A.: Inzision oder Tonsillektomie? Ein Beitrag zur Behandlung der paratonsillären Abszesse. *Arch. f. Ohren-Nasen- u. Kehlkopf.*, 131:310, 1932.
- Linck, A.: Die Paratonsillären Abszesse und die Abscess-Tonsillektomie (Winklersche Operation). *Ztschr. f. Hals-Nasen- u. Ohrenh.*, 33:227, 1933.
- Lind, H.: Die Tonsillenausschälung bei früher Tonsillotomierten Fällen. *Ztschr. f. Laryng., Rhin., Otol.*, 26:13, 1935.
- Love, J. K.: Results of the so-called tonsils and adenoids operation. *Lancet*, 1:1356, (June 25) 1932.
- Neumann, H.: Einige Bemerkungen über adenoide Vegetationen und die Adenotomie in der ersten Wochen und Monaten des Lebens. *Monatsschr. f. Ohrenh.*, 66: 922, (Aug.) 1932.
- Nordwall, U.: Scarlet fever and diphtheria in tonsillectomized children. *Acta Pediat.*, 15:338, (June 5) 1934.
- Novak, F. J.: Discussion on paper by Yonker.²⁹
- Orosz, D., and Kugler, G.: Tonsillektomie und Schick-reaction. *Arch. f. Kinderh.*, 94:168, (Sept. 11) 1931.
- Pilot, I., and Davis, D. J.: Tonsillectomy in carriers of streptococcus epidemicus. *Jour. Infectious Dis.*, 48:501, (May) 1931.
- Shambaugh, G. E., Dougherty, C. L., and Yonker, W. J.: Electrocoagulation in practice of otolaryngology. *Surg. Clin. N. A.*, 12:1157, (Oct.) 1932.
- Skillern, S. R.: Is electrocoagulation the best method for removal of faucial tonsils? *Arch. Phys. Therap.*, 13:587, (Oct.) 1932.

25. Taptas, N.: A propos de la phyemie postangineuse; l'enucleation des amygdales au cours de l'abces peritonsillaire et des inflammations amygdaliennes aigues. *Presse Med.*, 40:414, (Mar. 16) 1932.
26. Topper, A., and Leader, S.: Effect of tonsillectomy and of adenoidectomy on immunity to diphtheria. *Am. Jour. Dis. Child.*, 45:735, (Apr.) 1933.
27. Werner, A.: Die Tonsillektomie bei Diphtheriebazillen-trägern. *Arch. f. Ohren-Nasen- u. Kehlkopfh.*, 128:115, (Feb. 28), 1931.
28. Wood, G. B.: Discussion. *Arch. Otolaryng.*, 21:210, (Feb.) 1935.
29. Yonker, W. J.: Obstacles encountered in electrocoagulation of the tonsils. *Arch. Otolaryng.*, 20:125, (July) 1934.
30. Zambrini, A. R., and Podesta, R.: La amygdalectomia immediata: metodo de eleccion en el tratamiento de los Abscessos paratonsillares. *Semana Med.*, 1:229, (Jan. 19) 1933.
31. Zöllner, F.: Die Tonsillektomie bei noch frischen Entzündungen. *Münch. Med. Wehnschr.*, 81:634, (Apr. 27) 1934.
32. Zöllner, F.: Tonsillektomie oder Incision bei paratonsillärem Abscess? *Ztschr. f. Hals-Nasen- u. Ohrenh.*, 35:509, (May 15) 1934.
33. Zsindely, S. von: Einfluss der Mandelausschälung auf die nachträglichen Scharlach- und Diphtherie-Erkrankungen. *Arch. f. Ohren-Nasen- u. Kehlkopfh.*, 138:195, (Aug. 22), 1934.

IONIZATION FOR NASAL ALLERGY

Experiences and Correlation of Information

STANLEY J. JOYCE, M.D.†

DETROIT, MICHIGAN

Ionization for nasal allergy has created widespread interest due to reports of permanent cures or prolonged relief without harmful after-effects. No other procedure approaches the claims advanced for nasal ionization in vasomotor rhinitis and hay fever asthma.

The present wave of interest in ionization arose from a report by Demetriades¹¹ in 1927 of relief in vasomotor conditions of the nose and from reports of spectacular results in the treatment of hay fever-asthma, by Franklin¹² in 1931 and Warwick³⁸ in 1934. Franklin¹² reported complete relief of symptoms in three patients for six years, in one for four years, and in another for two years. Warwick³⁸ reported forty cases, nineteen of which were free of symptoms thereafter for more than three years; and all but one had complete relief for more than a year. Alden¹ reported nine cases of nineteen treated free of hay fever symptoms in September of the following year. Of ten hay fever patients ionized by Bryant⁸ in the season of 1934, four had no return of symptoms during the 1935 season (one of whom had obtained little improvement in the 1934 season), two had mild symptoms, and one was uncontacted. These excellent results had continued without interruption to the time of the reports. Other experiences are too recent to know of effects in later seasonal attacks. Over twenty^{2, 4, 7-10, 16-21, 23, 25-27, 30, 33-37} additional articles attest that ionization is a definite advance in the treatment of nasal allergy.

House and Gay,²² Ramirez,³¹ and Alexander³ have reported disappointing results from ionization for nasal affections and state that a number will suffer asthmatic manifestations afterward. They attest that some non-allergic rhinitis conditions will respond favorably.

†Dr. Joyce obtained a B.S. degree from the University of Detroit. He was graduated from the University of Michigan Medical School in 1922. He is especially interested in Allergy and Dermatology.

Technique

The common nasal ionization treatment is effected by shrinking and anesthetizing the nasal mucous membranes. The nasal cavity is then completely, uniformly and firmly packed with a material saturated with certain metal salt solutions in the middle of which an electrode of the same metal is placed. A positive galvanic current is then run through the packing. Various electrodes, electrolytes and doses of galvanisms are used.

Early Reactions after Treatment

During and after treatment the patient may experience the usual general feelings of any local operative procedure such as faintness, weakness, palpitation, nervousness, tremulousness or mild shock. There may be variable degrees of salivation, metallic taste, lacrimation and discomfort of the eyes. The packing is removed when the treatment is completed and the mucous membrane presents a contracted grey appearance. Soon the nose begins to drip a watery transudate which is decreased greatly as the mucous membrane swells tight, completely blocking ventilation in the course of a few hours. As the anesthesia wears away, the patient experiences various degrees of nasal burning, pain in the cheek, teeth, about the eyes, and

headache (well described by Demetriades¹¹ as a mild trigeminal neuralgia). These symptoms mostly affect the treated side and continue from six to twelve hours. There may be variable swelling of the side of the face and of the eyelid, even to closure, for twenty-four hours. When both sides are treated at the same time the patient experiences dysphagia because of a post-nasal vacuum.

Variable nasal blockage may continue for one to four days, and is relieved as the edema subsides and as the coagulated exudate liquefies or separates. For several days thereafter the patient may experience symptoms such as with a mild rhinitis. By the end of ten days the treatment reaction is entirely cleared and the mucous membrane usually presents a healthy red appearance in marked contrast to its former paleness—a remarkable change often noted. Many authors state that the patient has immediate relief of symptoms, a fact not difficult to understand with complete nasal blockage and total loss of nasal function.

Discomfort after Ionization

The reaction caused by nasal ionization is proportionate to the area treated, to the size and shape of the nasal space, and to the dose of galvanism. The discomfort also depends upon the patient's stoicism, and is definitely greater than the impression gained from most published reports. It requires sedatives, analgesics and narcotics in sufficient amount to comfort each patient as necessary from time to time during the first eight to twelve hours following treatment. Cold applications give doubtful relief. Though unnecessary, reaction care is best met in a hospital where requirements can be handled as they arise. Otherwise, no difficulties are presented in the treatment of patients by nasal ionization in the office.

Most operators ionize each side of the nose at different sittings to limit severity of reaction discomfort and for better control of possible ill effects or complications. However, some operators and patients may prefer a single severe reaction to several lesser ones. Usually there is some degree of sympathetic disturbance on the untreated side.

Ionization for nasal allergy can be done effectively at any time, although best results are obtained when performed just prior to or at the time of symptom development. In

cases that fail to respond, the treatment can be repeated.

Nature of Ionization

No satisfactory explanation of the effective results of ionization has been made, although many theories are offered. For the present, it may properly be said to have a sub-cauterization effect. Walker et al,³⁷ using the spectroscope, and Lierle and Sage²⁶ by various investigations, failed to find evidence of metal deposit in the tissues.

III Effects and Complications from Ionization

Three cases of anosmia after ionization have been reported.^{5, 24, 39a} The majority of references specifically mention absence of harmful after-effects. Alden² cites the well-known instance of complete regeneration of normal antral epithelium after denudation of the entire lining. He sees no cause for surprise if the nasal mucosa is undamaged after the milder insult of ionization as it is more accustomed to trauma. Hollender²⁰ has yet to observe any deleterious effects after giving over one thousand nasal ionization treatments in twelve years. A number have mentioned onset or aggravation of asthma following ionization.

Few early complications have been reported. Bryant⁷ records four cases of acute naso-pharyngitis and antritis occurring on the second and third days after treatment, believed to have been caused by too early an attempt to remove the membrane slough. Warwick³⁹ observed multiple abscesses about the nose until tin and cadmium were added to the zinc electrode and electrolyte. Hansel¹⁵ reported two cases of acute maxillary sinusitis after ionization.

Microscopic Observations

Microscopic examination of sections taken from ionized nasal mucosa in both animals and humans have been made by several authors. In sections examined by Haseltine¹⁷ after the initial changes had cleared, the mucosa was undamaged; and in those examined by Alden² and Warwick³⁹ there was no evidence of pathology that might have been attributable to the ionization. Microscopic examination by Hollender²¹ and

Cottle¹⁰ disclosed initial destruction and subsequent regeneration of the surface epithelium but absence of cilia. In the submucosa there was marked lymphocytic infiltration with gradual later subsidence, and a tendency to structural density. McMahon^{28,29} examined the nasal tissues of several dogs that had been ionized for 50 minutes. The epithelium resumed a normal condition, but a definite fibrosis was established in the submucosa. He depicted the possibility of a premature nasopause due to secondary effects of a consequent depleted blood supply and therefore further fibrosis—a vicious circle. In the lamb normal ciliated epithelium with glands is regenerated after excision of parts of the nasal mucous membrane, after repeated injury and after one or more ionizations, according to observations by Boling.⁶ He noted the early effect of zinc ionization as destruction of the general epithelium with hyperemia and leukocytosis. Sections examined by Banks^{37b} showed denuded areas of mucosa, and submucosal cellular disarrangement, edema and infiltration with return to a normal condition in eleven days. Alexander³ reported acute inflammatory changes immediately after treatment and a little fibrosis, insufficient to interfere with function, as the only permanent change. None has noted later changes in the mucous glands. Hurd²³ stated ionized polyp tissue contained changes from edema to a definite coagulation but without necrosis, while Hansel¹⁵ found necrosis.

Immunologic and Cytologic Observations

Alden² and Alexander⁴ have contributed interesting immunologic observations. Skin sensitization tests, examinations of nasal secretions and passive transfer tests were made before and after nasal ionization. There were no changes in the skin reactions nor of the eosinophiles in the nasal secretion. Patients obtaining best results showed absence or decrease of blood reagins; the converse also being true. Reactions to nasal mucosa tests with pollen extracts were absent or greatly decreased after nasal ionization.

Scope of Ionization

There is no relation of results obtained from nasal ionization to the type of nasal

allergy or complications according to most reports. This includes the degree of sensitivity, and the quantity, quality or combinations of allergins. Also, whether the action of the excitant is allergic, chemical, irritant or infective. A number of cases have obtained relief of hay fever-asthma after ionization to only one side.^{17, 30, 35}

Intranasal hypertrophies, polyps or a deflected septum may interfere with proper packing, should be dealt with separately, and are the only limitations to ionization treatment. Effective results of nasal ionization in acute and chronic rhinitis, catarrhal conditions, post-operative granulations and polypoid hypertrophies have been noted and offer additional collateral indications. Beneficial effects have also been reported in allergic conjunctivitis, recurrent corneal ulcers, non-seasonal asthma, ozena, partial and complete anosmia, food sensitivities, urticaria, migraine, nasal headaches and susceptibility to colds. Patients frequently note greater freedom of nasal breathing and greater ease in clearing nasal secretions after ionization.

Patients with nasal allergy are frequently subject to non-seasonal colds, especially in winter months; and the effect of ionization in these cases may yet prove valuable. Warwick³⁹ and Walker³⁷ reported ionized patients less susceptible to colds. Sternberg³² (with concurrence by Vanderveer and Cooke) made the same comment in pollen desensitized patients and noted greater freedom from colds in proportion to the amount of relief obtained.

Summary of Other Reports

Difficulties arise in summarizing reports of nasal ionization treatments in nasal allergy, because there is no uniformity of presentation and pertinent details are sometimes lacking. In some articles interpretation is left to the reader's judgment. Where authors have published several reports there has been no mention whether or not there are overlapping cases. Some authors have omitted case reports. The majority of cases had extremely severe symptoms and had exhausted other methods of treatment without satisfaction. See Tables I and II. Where data are lacking in these tables, they were not made out.

IONIZATION FOR NASAL ALLERGY—JOYCE

TABLE I. SUMMARY OF ALL REPORTED CASES OF HAY FEVER TREATED BY IONIZATION, INCLUDING THOSE COMPLICATED BY SEASONAL ASTHMA AND VASOMOTOR RHINITIS

Author	Number of patients ionized	Complete relief	Percentage of complete relief	Failures	Result unknown	*Complicated with seasonal asthma	Complete relief of seasonal asthma	Remarks
Franklin ¹²	22	22	100	0				These patients had tried every known method of treatment unsuccessfully.
Franklin ¹³	14	11		3				These patients were given 6 pre-seasonal treatments to each side of the nose.
	77	54		6	11			These patients were given 2 to 3 co-seasonal treatments to each side of the nose.
Franklin ¹⁴	200		50					95% were relieved in following season.
Warwick ³⁸	38	37		1		3	3	One case with hay fever-asthma required another treatment during the next season.
Warwick ³⁹	225	209		16				
Alden ¹	19	19	100	0		4	4	Treated during season. Nine had complete relief in the next season, two others on re-ionization and eight others had such slight symptoms that treatment was inadvisable.
	41	27		8	6			Two of failure cases refused re-ionization and four were having so little discomfort that treatment was inadvisable.
Van Osdal ³⁴								Author's table code unexplained.
Hays ¹⁹	7	5		1				
	5	4		1				Dr. Kaiden's cases.
Bryant ⁷	1934 8	6		0	1	2	2	Two of these patients were complicated with vasomotor rhinitis and both obtained complete relief.
	1935 12	9	90	0		6	4	Two of failure cases had 80% relief of their seasonal asthma and 100% of their eye and nose symptoms.
Hurlbut ²⁵	45	42		3				On re-ionization two of the failure cases had satisfactory relief.
Tobey ³³	8	4		0				Those without complete relief had 50% to 90% benefit.
Haseltine ¹⁷	40				3			Other details unmentioned.
	100							Reports collected from 22 rhinologists showed results identical with author. ¹⁵
Miller ³⁰	8	8						
Hollender ²¹	83		60					
Alden ²			60-70	20%				
	605	388		47		161	85	These are requested reports from a group of otolaryngologists. Of these 28 were complicated with vasomotor rhinitis, 19 of whom obtained complete relief.

*These cases are included in column of number of patients ionized.

TABLE I. SUMMARY OF ALL REPORTED CASES OF HAY FEVER TREATED BY IONIZATION, INCLUDING THOSE COMPLICATED BY SEASONAL ASTHMA AND VASOMOTOR RHINITIS

Continued

Author	Number of patients ionized	Complete relief	Percentage of complete relief	Failures	Result unknown	*Complicated with seasonal asthma	Complete relief of seasonal asthma	Remarks
Volk ³⁵	9	7		0		3	3	One case is not included in summary because of inadequate treatment for fear of miscarriage—52 ma. minutes to only one side.
Walker ³⁶	19	18			1	3	3	
Hurd ²³	521	302	58	58				Complete relief in these cases is construed to include 95% to 100% relief.
Alexander ⁴	19	6		8		4	2	
Hayden ¹⁸	5	5						
Ramirez ³¹	50	0		50				
House & Gay ²²	8	2		6		4	1	Improved.

*These cases are included in column of number of patients ionized.

Author's Cases

Thirteen cases of nasal allergy treated by ionization are presented in detail because of many interesting incidences, to furnish material for those studying the subject and to assist the evaluation of any new treatment attack. No nose nor throat surgery had been performed unless mentioned.

As in reports by other authors most of these cases had severe symptoms and were dissatisfied with desensitization results. On account of distortion from swelling of the face and of the eyelids to closure a number were unsightly for twenty-four to forty-eight hours after treatment. No case developed complicating infections after ionization. None suffered impairment of smell and several reported improvement.

Case Reports

Case 1.—A man, aged thirty-nine, had had fall hay fever with asthma for nine years and had received treatments each season with pollen extracts resulting in relief varying from 50 per cent to 75 per cent. He had a submucous resection and a bilateral partial turbinectomy in 1924. The right side of the nose was ionized on July 29, 1935, for 95 ma. minutes with a moderately severe reaction afterward. The left side of the nose was prepared for ionization on August 13, 1935. After shrinkage a polyp was found under the middle turbinate. The nasal mucosa above the polyp was ionized for 100 ma. minutes and then the polyp was removed. There

was a moderately severe reaction. The patient obtained 99 per cent relief from hay fever and suffered no asthma.

Result: Excellent.

Case 2.—A man, aged forty-eight, had had non-seasonal asthma, especially with colds, for forty-three years, and very severe late summer and fall asthma for ten years without previous treatment. He had little associated nasal and eye symptoms. Polypoid degenerations were present on both sides and exenterated. Preseasonal ragweed extract treatments were given. The right side was ionized on July 6, 1935, for 105 ma. minutes with a moderately severe reaction afterward. There was a large slough membrane. The left side was ionized on August 17, 1935, for 117 ma. minutes and a moderately severe reaction followed. Moderate asthma that had been present for five days began to clear immediately and after several days the patient had no further symptoms. Result: Excellent.

Case 3.—A woman, aged twenty-seven, had had fall hay fever with severe asthma for ten years and had never had desensitization treatments. The left nasal side was ionized on August 27, 1935, receiving 100 ma. minutes with a severe reaction following. The right side was ionized on August 31, 1935, receiving 110 ma. minutes, also with a severe reaction. The hay fever and asthma symptoms gradually lessened and there was no further trouble after mid September. The patient considered her relief to be 80 per cent and was quite satisfied. Result: Good.

Case 4.—A man, aged twenty-six, had had early and late hay fever with severe asthma for years. The patient had taken desensitization treatments with extract of grass pollens three seasons with good results. He had had several intra-nasal operations. Pollen desensitization test in April, 1935, gave strong reactions to timothy, red top, and short ragweed. The patient was given pre-seasonal

and seasonal treatments with extracts of timothy and red top. In early June he began to have severe asthma, necessitating adrenalin. The right side of the nose was ionized on June 26, 1935, for 102 ma. minutes with great difficulty on account of severe asthma. A moderate reaction followed. The left side was ionized on July 3, 1935, for 104 ma. minutes with a moderate reaction. The asthma gradually cleared after completion of treatment, returned for 3 days after July 13, and then there was no further trouble for the remainder of the season, although not desensitized against weed pollens. Result: Good.

Case 5.—A man, aged thirty-seven, had had fall hay fever for twenty-five years. He had received a course of vaccine treatment in 1917, and thereafter yearly pre-seasonal pollen extract treatments with approximately 75 per cent relief. He had a tonsillectomy in 1917, and a submucous resection in 1918. Both sides of the nose were ionized on August 10, 1935, for 100 ma. minutes each with a severe reaction. Patient had no hay fever symptoms for ten days, then had morning symptoms for two hours, greater on the left. On September 10, 1935, the left middle turbinate and posterior superior nasal area were re-ionized. Thereafter there was 80 per cent relief of symptoms. Throughout there was little interference with nasal breathing. As an after-effect, he had considerable relief from an annoying chronic mucous catarrh, in itself warranting the inconveniences of ionization. Result: Fair.

Case 6.—A man, aged fifty, with fall hay fever of six years duration, had received pre-seasonal pollen extract treatments for five years with no better than 50 per cent relief. He had a submucous resection in 1914. His nose was mechanically poor. The right side was ionized on June 8, 1935, for 100 ma. minutes with a moderate reaction. The left side was ionized on June 14, 1935, for 107 ma. minutes with a severe reaction. He suffered no hay fever during August and thereafter his estimated relief was about 50 per cent. He had complete relief of sneezing and nasal itching and suffered little rhinorrhea and conjunctival itching. Nasal blockage was severe in the last three weeks of his season. Result: Fair.

Case 7.—A young man, aged nineteen, had had fall hay fever for ten years. Pollen extract treatments were taken in 1932 without benefit. Both sides were ionized on August 26, 1935, for 95 ma. minutes on each side with a moderate reaction. There was complete relief of all nose itching, watering and sneezing thereafter. Eye itching and paroxysmal nasal blockage of either side continued to cause considerable discomfort. Result: Failure.

Case 8.—A woman, aged forty-five, had had early, late and perennial hay fever for three years. With rhinitis attacks she had severe inflammatory excoriations all about the external nares. Skin scratch sensitization tests in May, 1934, gave marked reactions to orchard grass, corn, June grass, timothy, short and giant ragweed. Pre-seasonal treatments with pollen extracts of timothy, June grass, orchard grass and short ragweed gave satisfactory relief. Skin scratch sensitization tests in April, 1935, gave marked reactions to timothy only. She was treated with pollen extracts of red top and timothy. She suffered moderately severe early hay fever symptoms. The right side of the nose was ionized on June 1, 1935, for 90 ma. minutes with a moderate reaction. The symptoms improved but continued until the left side was ionized on July 2, 1935, for 103 ma. minutes. The patient had complete relief thereafter. When examined on Nov. 2, 1935, the nasal mucosa was clean, not swollen, and presented only a suggestion of its usual pallor. She was ev-

treinely happy about the condition of her nose. Result: Excellent.

Case 9.—A woman, aged thirty-five, had had fall hay fever for six years without previous treatment. Her nose was mechanically good. There had been three tonsil operations. The right side of the nose was ionized June 23, 1935, for 90 ma. minutes with a severe reaction. The left side was ionized on August 24, 1935, for 91 ma. minutes, also with a severe reaction. The smaller dose was given on account of restricted nasal space. She had 90 per cent relief on the right side and about 75 per cent on the left. She stated a willingness to have the treatment repeated again for similar relief. Result: Good.

Case 10.—A man, aged forty-three, had had fall hay fever with very severe asthma for sixteen years. He took ragweed desensitization treatments preceding seven seasons, obtaining best results with the first course and less with the succeeding ones until the last three, which were completely ineffective. He had several intra-nasal and antral operations. He had a mechanically poor nose. The right side was ionized June 8, 1935, for 100 ma. minutes with a severe reaction. There was temporary disturbance of vision and right temple pain for three weeks. The left side was ionized on August 3, 1935, for 108 ma. minutes with a moderate reaction. He then spent two weeks vacation in a northern hay fever resort. Several days after returning, hay fever asthma symptoms started and in a short time became very severe, especially the asthma. He obtained relief for eight days with re-ionization treatment. Application of phenol to the nasal mucosa had no effect on his asthma, which gradually increased in severity and only ended with the season. Result: Failure.

Case 11.—A man, aged thirty-nine, had had fall hay fever for six years. Pollen desensitization treatments were taken before two seasons without satisfaction. He had a tonsillectomy in 1924. Both sides of the nose were ionized on August 24, 1935, for 95 ma. minutes to each and a severe reaction followed. He had complete relief of nasal itching and rhinorrhea, and was troubled only little by sneezing and general discomfort, whereas before treatment he had been generally miserable, including indisposition, nausea and dizziness. The eye symptoms and nasal blockage were changed slightly. For a period the patient had periodic temporary bilateral Eustachian tube blockage. There was a later grateful improvement in a dry chronic catarrhal condition, and in ease of clearing nasal secretions. Result: Fair.

Case 12.—A woman, aged thirty-two, had had daily attacks of vasomotor rhinitis for one year. There was associated paroxysmal loss of taste and smell senses. The nasal mucosa was pale and glistening. There was mild polypoid degeneration of the right middle and superior turbinates. The right side of the nose was ionized on June 6, 1935, for 93 ma. minutes and a moderately severe reaction followed. Relief was immediate and the patient was so comfortable she did not consider ionization of the other side necessary.

Result: Excellent.

Case 13.—A man, aged forty-seven, had had fall hay fever for sixteen years, and had taken desensitization treatments preceding six seasons without satisfaction. Tonsils and adenoids were removed in 1927. On August 10, 1935, the right side of the nose was ionized for 100 ma. minutes and the left side for 120 ma. minutes. There were severe reactions and general indisposition continued for five days, at which time complete nasal blockage first began to open. There was a heavy membrane slough. The patient had complete relief of all hay fever symp-

IONIZATION FOR NASAL ALLERGY—JOYCE

TABLE II. SUMMARY OF ALL REPORTED CASES OF IONIZATION IN UNCOMPLICATED VASOMOTOR RHINITIS

Author	Number of patients	Complete relief	Improved	Failures	Remarks
Demetriades ¹¹	14	13	1	0	We conclude six of these patients conclusively had vasomotor rhinitis. The remainder present a question between vasomotor and infectious factors. Secretion cells were not examined. No qualification of "schnupfen" for years allows an interpretation as continuous chronic or frequent acute attacks of rhinitis. Relief continued in these patients for periods up to eight months.
Franklin ¹²	3	3			
Franklin ¹³	12	2	4	6	The six failure cases discontinued treatment before completion.
Franklin ¹⁴	20	12	4	4	Application of sat. sol. of chromic acid to the middle turbinate was made before ionization.
Warwick ³⁸	2	2			
Van Osda ³⁴					Author's table code unexplained.
Hays ¹⁹	8	5	2	1	
	1		1		Case of Dr. Maxwell Kaiden.
Bryant ⁷	2	1		1	
Tobey ³³	8	4	4	0	
Haseltine ¹⁷	2	2			Patients were also given indicated general care.
Hollender ²⁰	32	17	10		
Miller ³⁰	2	2		0	
Cottle ¹⁰	10	9		1	Marked relief.
Alden ²	73	34	16	9	
Volk ³⁵	1	1		0	
Walker ³⁶	2	2			
Hurd ²³	111	47	36	20	
Alexander ⁴	6	5		1	
Hayden ¹⁸	5	5			
Ramirez ³¹	25				Vast majority improved.
House-Gay ²²	7		3	4	

toms. Later the patient had a number of minor attacks of epistaxis and a feeling of intranasal tenderness. There has been more freedom from colds and less mucous catarrh.

Result: Excellent.

Interesting Observations

Usually pollen desensitization failures have symptoms in variable degrees as in untreated seasons for the individual case. Ionization failures differed frequently by

having variable or complete relief from one or more of the hay fever-asthma symptoms, although without uniformity. One side or a portion of the same side may differ in this respect from the other. Rhinorrhea, sneezing, asthma, eye watering and itching in all areas were more commonly relieved in the order listed. Nasal blockage was least benefited. Ventilation was usually better in the

lower nasal spaces than in the upper, and this was often manifested only by a nasal voice without any associated discomfort otherwise.

The writer has more commonly found allergic changes of the middle turbinate and in the posterior superior nasal area. The latter space is restricted and is easily closed by swelling due to irritation, sensitivity or infection, in which event absorption effects may follow. An interesting incident of this nature occurred in Case 4. This patient returned on July 13 with a severe asthmatic attack which had started during the night. With return of ventilation in the posterior superior nasal space after removal of blockage crusts, the asthmatic attack spontaneously cleared in an hour. Directions were given for the use of a bland oil locally to assist in clearing away debris, yet the same phenomena were repeated. After having asthma most of the third night the symptoms subsided before coming to the office for examination, at which time the nasal space was entirely clear. There was no further blockage nor symptoms.

Many questions look to future experience for answers. Principal interest concerns the mechanism of action, other reports of permanent cures, microscopic differences in tissues of successful and failure cases, standardization of doses, electrodes and electrolytes, and some simple method of application with lessened discomfort. In cases where desensitization, ionization or pollen air filtration of sleeping quarters had failed to give relief separately, it will be important to know if combinations may prove effective.

Insufficient microscopical study of ionized nasal tissues has been made to warrant definite conclusions. The possibility of cumulative effects due to fibrosis suggests that anxiousness for early relief of symptoms should be avoided in favor of the smallest dose required to obtain eventual results. The extensive clinical use of nasal ionization without ill-effects justifies the soundness of the procedure.

The common practice in the treatment of hay fever-asthma before the introduction of pollen desensitization in 1910 by Noon and Freeman was by local cauterization with the galvano-cautery or caustic chemicals. A few advocated searing the entire nasal lining; most, however, claimed success by local treatment to selected "sensitive" or "trig-

ger" areas. Much attention has been focused upon the rôle of the sphenopalatine ganglion. Because ionization is in effect a subcauterization, experience would suggest attempts be made to obtain results by ionization treatments to selected areas, if only in cases that had failed to respond after original treatment or where certain areas appeared to warrant further treatment.

Conclusions

Nasal ionization offers more hope for a permanent cure or prolonged relief than any other procedure in vasomotor rhinitis and hay fever-asthma.

It is safe, comparatively simple and free from subsequent functional ill-effects if used with reasonable caution.

Ionization gives better results than other methods of treatment during active hay fever stages.

Degree of patient's sensitivity or the quantity, quality or combinations of allergens are irrelevant to results from ionization.

It will find especial use in cases that have failed to obtain relief by other methods, in perennial hay fever where specifics and etiology are often undeterminable; and in cases affected by combinations of early, late and perennial hay fever where desensitization injections would be overwhelming.

Because spontaneous cessation of hay fever seldom occurs, ionization with its possibility of permanent cure will be particularly welcome to the younger victims.

Ionization is particularly adapted to cases of nasal allergy complicated by chronic nasal infections, catarrhal conditions, and moderate soft hypertrophies or degenerations.
3001 W. Grand Boulevard.

References

1. Alden, Arthur M.: A year's work with ionization in the treatment of hay fever. *Laryngoscope*, 44:741-744, (Sept.) 1934.
2. Alden, Arthur M.: The response of allergic phenomena to ionization. *Laryngoscope*, 45:620-633, (Aug.) 1935.
3. Alexander, H. L.: Nasal ionization—Preliminary observations (Abstract). *Jour. Allergy*, 7:87-88, (Nov.) 1935.
4. Alexander, H. L., and Alexander, J. H.: Ionization of the nasal mucosa, relationship between reagins in the blood and effect of treatment. *Jour. Allergy*, 6:240-244, (March) 1935.
5. Blassingame, Charles D.: In discussion of References 23 and 29. *Arch. Otolaryng.*, 22:779, (Dec.) 1935.
6. Boling, Leroy R.: Regeneration of nasal mucosa. *Arch. Otolaryng.*, 22:689-725, (Dec.) 1935.
7. Bryant, Ben L.: The Warwick ionization treatment of hay fever and hyperesthetic rhinitis with report of cases. *Jour. Med.*, 15:598-601, (Feb.) 1935.
8. Bryant, Ben L.: Ionization in hay fever: Indications, technic, scope. *Arch. Phys. Therapy*, 16:613-617, (Oct.) 1935.
9. Compilation of Results by Many Physicians by the Burdick Company, quoted by Hurd²³ (footnote 26).
10. Cottle, M. H.: Nasal ionization by a new simplified technic. *Arch. Phys. Therapy*, 16:405-410, (July) 1935.

11. Demetriades, Th. D.: Zur Behandlung der Vasomotorischen Störungen der Nase durch Iontophorese (Rhino-Kataphorese). *Monatschr. F. Ohren-Heilkunde*, 61:524-533, (May-June) 1927.
12. Franklin, Philip: Treatment of hay fever by intranasal zinc ionization. *Brit. M. J.*, 1:1115-1116, (June) 1931.
13. Franklin, Philip: Intranasal treatment by ionization in hay fever, vasomotor rhinitis, and ozoena. *Brit. M. J.*, 1:751-752, (April 23) 1932.
14. Franklin, Philip: The value of intranasal ionization. *Medical Press and Circular*, London, Vol. 190, (March 20) 1935.
15. Hansel, F. K.: In discussion of References 3 and 22. *Jour. Allergy*, 7:89, (Nov.) 1935.
16. Haseltine, Burton: Ionization in the treatment of nasal hyperesthesia. *Eye, Ear, Nose and Throat Month.*, 13:257-261, (Aug.) 1934.
17. Haseltine, Burton: The place of ionization in the treatment of hay fever. *Clin. Med. & Surg.*, 42:159-161, (April) 1935.
18. Hayden, Austin: Ionization for hyperesthetic rhinitis: A preliminary report. *Arch. Otolaryng.*, 22:393-400, (Sept.) 1935.
19. Hays, Harold: Ionization of the nasal mucosa for hay fever, hyperesthetic rhinitis and certain types of asthma. *Med. Rec.*, 141:23-25, (Jan. 2), 1935.
20. Hollender, A. R.: Ionization as a prolonged palliative in vasomotor rhinitis. *Arch. of Otolaryng.*, 21:448-455, (April) 1935.
21. Hollender, A. R.: Further studies with zinc ionization in nasal allergy. *Arch. Phys. Therapy*, 16:359-362, (June) 1935.
22. House, Hugh O., and Gay, Leslie N.: Treatment of pollen hay fever and rhinitis by ionization of the mucous membrane. (Abstract), *Jour. Allergy*, 7:86-87 (Nov.) 1935.
23. Hurd, Lee M.: Treatment of hay fever and hyperesthetic rhinitis by ionization. *Arch. Otolaryng.*, 22:416-425, (Oct.) 1935.
24. Hurd, Lee M.: In discussion of References 23 and 29. *Arch. Otolaryng.*, 22:780 (Dec.) 1935.
25. Hurlbut, J. A.: Treatment of hay fever by ionization method. *Wisconsin Med. Jour.*, 34:93-94, (Feb.) 1935.
26. Lierle, D. M., and Sage, R. A.: The underlying factors in the zinc ionization treatment of middle ear infections. *Ann. Otol., Rhin. & Laryng.*, 41:359-369, (June) 1932.
27. McCaskey, C. H.: Zinc ionization in hay fever. *Trans. Indiana Acad. Ophth. & Otolaryng.*, 18:112-115, (Dec.) 1934.
28. McMahon, Bernard J.: Effects of ionization on the mucosa of frontal sinuses of dogs. *Ann. Otol., Rhin. & Laryng.*, 43:643, (Sept.) 1934.
29. McMahon, Bernard J.: Late changes in the mucosa of the frontal sinuses and nose of dogs following ionization. *Arch. Otolaryng.*, 22:454-466, (Oct.) 1935.
30. Miller, C. M.: Treatment of hyperesthetic rhinitis (hay fever) by zinc ionization. *Virginia Med. Monthly*, 62:11-14, (April) 1935. *Ibid.* *Bul., Stuart Circle Hospital*, 1:32-36, (April) 1935.
31. Ramirez, Maximilian A.: Disappointing results from the ionization treatment for hay fever. *Jour. A. M. A.*, 106:281-282, (Jan.) 1936.
32. Sternberg, Louis: The effect of pollen injections in the common cold in hay fever subjects. *Jour. Allergy*, 6:304, (March) 1935.
33. Tobey, Harold G.: Experiences in ionization of the nasal mucous membrane. *Ann. Otol., Rhin. and Laryng.*, 44:94-97, (March) 1935.
34. Van Osdal, H. A.: Zinc ionization in hay fever. *Trans. Indiana Acad. Ophth. & Otolaryng.*, 18:115-129, (Dec.) 1934.
35. Volk, Lester D.: Iontophoresis in hay fever and allergic conditions. *Laryngoscope*, 45:607-620, (Aug.) 1935.
36. Walker, G. W.: Ionization treatment in hay fever, *Calif. and West. Med.*, 42:263-264, (April) 1935.
37. Walker, J. R., Walker, B. G., and Walker, G. W.: Ionization treatment of hay fever. *Arch. Phys. Therapy*, 16:549-551, (Sept.) 1935. (a) Aronson, Sidney A.: In discussion; (b) Banks, H. M.: in discussion.
38. Warwick, Harold L.: Treatment of hay fever and its allied conditions by ionization. Preliminary report. *Laryngoscope*, 44:173-181, (March) 1934.
39. Warwick, Harold L.: Desensitization of nasal mucous membranes for the relief of hay fever, asthma and food allergy. *Texas State Jour. Med.*, 30:210-215, (July) 1934. (a) Foster, John H.: In discussion.

ASPHYXIA AS A FACTOR IN PARESIS

Medico-Legal Significance

MAX H. SKOLNICK, A.B., M.D.†

DETROIT, MICHIGAN

Although paresis is a well known complication or sequela of general systemic syphilis, there has been little written on the importance of the influence of external factors in precipitating paresis in syphilitic individuals. The rôle of asphyxia with its subsequent effect on the brain constitutes one of the factors that will be discussed in this article. The following case, which was awarded complete compensation, forms the basis for the discussion:

Case Report

C. S., white, male, age forty-seven years, a fireman by occupation. The patient's medical records and his wife's testimony state that the patient was in apparent perfect health up to the time of an accident which occurred on January 14, 1930. In that accident, while performing his duties as a fireman, the patient was rendered unconscious by asphyxiation as a result of dense and hot smoke fumes. He was removed to a hospital, remaining unconscious for an indefinite period of time, the exact length of time being unknown. In spite of contrary advice, he was released the following day from the hospital upon his own insistence. He reported for duty the next day, but because of his

unusual poor state of health he was not assigned to work until January 18, 1930. Dating from this incident, he still was unable to perform his duties in his usual manner. Two years later, he suffered an additional setback. At that time, he was temporarily intoxicated by dense smoke fumes almost to a point of complete asphyxiation. He exhibited stupor, weakness, and blurring of vision. While attempting to drive his car home, he was aware of increasing stupor and dimness of vision, and sought aid at a nearby police station. The symptoms of headache, dizziness, pains in the eyes, weakness and fatigue persisted for some time. Approximately four years later, in 1934, he began to exhibit symptoms with distinctive personality changes. He became irritable, careless about his person and clothes, tired easily, absent minded with signs of inability to concentrate and comprehend. This gradual failing in his normal mental powers began to take on a progressive dementia, which alarmed his family and associates. By the suggestion of others, he sought medical advice, which also revealed significant laboratory findings from his blood and spinal

†Dr. Skolnick obtained the degree of A.B. in 1929 and the degree of M.D. in 1932 from the University of Michigan. He served as externe at the Cedars of Lebanon Hospital, Hollywood, California, and as interne at the Harper Hospital and Women's Hospitals in Detroit, Michigan. He is practicing in Detroit in the field of internal medicine.

fluid. His blood revealed a strong reaction of syphilis (4 plus) by the Kahn determination, in addition to a four plus syphilitic reaction in his spinal fluid. The Gold Sol determination of his spinal fluid was typically that of paresis, namely, 5 5 5 5 5 4 3 2 2 1. The diagnosis of paresis was established, and the patient was institutionalized, where he still remains.

His personal history from medical records states that he had a chancre of his penis in 1914, at the age of twenty-five. He paid no further attention to this inasmuch as no definite medical diagnosis was made to him at any time. He married in 1918, and has two children, aged eleven and thirteen. After passing a medical physical examination in 1927, he was promoted to lieutenant, remaining in the service of the fire department until 1934, when he was institutionalized for the treatment of paresis.

In analyzing this case, the discussion will proceed according to the development of his natural medical history, subdivided, arbitrarily, into the following three progressive stages: Stage I, the development and infection of syphilis in a latent form beginning in 1914; Stage II, the development of asphyxia as trauma with injuries in repeated progressive forms beginning in 1930; and Stage III, the development of paresis as a final form discovered in the patient in 1934.

In Stage I, the entrance and presence of syphilis dates from the occurrence of the patient's chancre in 1914. No luetic treatment was given at any time. The following facts show that his infection of syphilis assumed a latent course: (1) no further exhibition of signs or symptoms of syphilis was evident either during the sixteen years preceding his injury or the few years following; (2) his wife and two children did not exhibit any signs of syphilis by mental, physical or laboratory tests; and (3) medical examinations of the patient up to 1934 did not disclose any signs of active syphilis. Thus the patient exhibited the presence of syphilis in an inactive stage in an otherwise previously healthy individual.

In Stage II, the medical records state that the patient was in apparent perfect health up to the time of his asphyxiation—by fumes and smoke in 1930. This was further complicated by an additional intoxication from fumes and smoke almost to a point of complete asphyxiation. Kober and Hayhurst⁴ state that injurious factors as inhalation of hot smoke and poisonous gases lead to disability which may be temporary or permanent, or may even lead to death. They also state that recovery of consciousness from asphyxiation of smoke

and gases may be left with transient or permanent psychoses. Hamilton² shows that damage done is traced to oxygen starvation, produced by asphyxiation which may lead to either transient or prolonged brain cell destruction. With prolonged asphyxia or repeated exposures to smoke and its gases, there is produced permanent damage to certain elements of the body—the cells of the central nervous system being most susceptible. Sequelæ of severe gassing are usually the abnormalities of cerebral or spinal function with anatomical changes found in the central nervous system. Thus, asphyxia becomes a most important factor in establishing the entrance or beginning of trauma in the patient with latent syphilis.

In Stage III, the patient exhibited gradual and progressive deterioration of mind with the condition of paresis first discovered and diagnosed in 1934. It is recognized by medical men that injury, trauma, and shock can have an important relationship with the development of paresis in an individual whose syphilis was latent. Mott⁵ states that all causes which tend to produce a lowering of local resistance in the nervous system of a syphilitic individual will predispose to the onset and progress of syphilitic affections of the brain. Thus head injuries may tend to act as contributory coefficients in the production of paresis in syphilitic individuals where the organism was presumably latent. He also states that in a certain number of cases in which injury has occurred, that, had there been no injury, paresis would not have ensued. Stokes⁶ states that it may now be accepted as axiomatic that an injury or localized disturbance of resistance is one of the most unfortunate things that can befall a patient who is carrying a syphilitic infection. Thus trauma can influence the course of syphilis from the beginning to the very end.

From a medico-legal point of view, head injuries so frequently precipitate the symptoms of paresis that trauma in any form in a syphilitic plays an important rôle in the question of responsibilities. Grinken¹ states that since trauma undoubtedly plays a rôle in the pathogenesis of syphilitic processes, compensation is usually granted with the syphilis present long before the injury. In this case, it was shown that the patient had a pre-existing disease of syphilis, which,

CANCER SURVEY OF MICHIGAN*

Made by
FRANK LESLIE RECTOR, M.D.†

Recommendations

The following recommendations are made for an improved cancer control program in Michigan:

1. Special tumor services for pay and indigent patients to meet so far as possible minimum standards of the American College of Surgeons should be organized in the following cities: Ann Arbor, Battle Creek, Bay City, Flint, Grand Rapids, Lansing, Muskegon and Saginaw. Detroit hospitals now offering some type of organized tumor service should perfect their organization until the minimum standards of the American College of Surgeons are met. Providence Hospital, Detroit, might well organize such service.

2. Deep therapy equipment and radium might well be provided for Receiving Hospital, Detroit, so that improved facilities for undergraduate teaching and an improved service to the cancer patient might be offered.

3. Facilities for examination of surgical issues and for radiation therapy should be made available locally to hospitals and residents of the upper peninsula.

4. An additional 6,000 milligrams of radium, or its equivalent, should be available in Michigan.

5. A radium emanation plant might well be provided at the University Hospital, Ann Arbor.

6. A comparable record system should be used by all hospitals treating cancer patients. Record forms of the American College of Surgeons, or their equivalent in data required, are recommended for this purpose.

7. Medically trained social workers could be attached to all special tumor services and should cooperate fully with clinical and record departments and staff members of hospitals with which they are connected.

8. The work of the Bureau of Cancer, Detroit, should be expanded until it contains information about the largest possible num-

ber of cancer patients in that city, and combines within its resources the essentials of a tumor registry. All Detroit hospitals and physicians should support the work of this Bureau.

9. A tumor registry should be organized at the University Hospital, Ann Arbor, and in Grand Rapids. Resources of these registries should be available to any reputable physician or scientist interested in this material.

10. Two or more joint meetings of the pathologists, radiologists, and surgeons of Michigan should be held annually for the discussion of mutual problems in the field of malignancy.

11. The Michigan State Medical Society should encourage laboratory examination of all tissues removed in all hospitals of the State.

12. The Michigan State Medical Society should encourage the making of biopsies on all accessible tumors or suspected tumors.

13. The Michigan State Medical Society should stimulate a higher percentage of autopsies in the hospitals of the State.

14. The Michigan State Medical Society should investigate methods of treatment of the 70 per cent or more of cancer patients not hospitalized during their illness.

15. The Michigan State Medical Society should urge inclusion of questions on cancer in all examinations for medical, dental, and nurse licensure.

16. The Michigan State Medical Society should sponsor a 5-year educational program among its members in which cancer of a different region would be studied each year.

17. At least one meeting annually of each local medical society should be devoted to cancer and each annual meeting of the State Medical Society should offer a cancer symposium and suitable related exhibit.

18. The Michigan State Medical Society should urge the appointment of cancer committees in all local medical societies in whose territories special tumor services are found.

19. The Cancer Committee of the Mich-

*Final installment. Continued from June, 1936, issue.
†Field Representative, American Society for the Control of Cancer, New York, N. Y., Clarence Cook Little, Sc.D., Managing Director.

Subs for meeting pp. 457, 460

igan State Medical Society should be made a permanent committee with a minority of its members changing annually.

20. The Michigan State Medical Society should sponsor a larger number of cancer subjects in the postgraduate courses of the University of Michigan.

21. The Michigan State Medical Society should stimulate hospitals to greater uniformity of procedures for diagnosis and treatment of cancer.

22. The Michigan State Medical Society should discourage rental of radium to unqualified physicians and should advise the public of the probable consequences when radium is so used. Advertisements of radium rental organizations offering an indiscriminate service to the medical profession should not be carried in the official publications of the state or local societies.

23. The Michigan State Medical Society should offer its resources and coöperation to the Michigan Federation of Women's Clubs in developing a State-wide lay educational program among the members of their organization.

24. The Michigan State Medical Society should stimulate the participation in cancer control programs of all Funds and Foundations in the State in so far as their policies and charters permit.

25. The Michigan State Medical Society in coöperation with the State Department of Health and the State Committee of the American Society for the Control of Cancer should organize a program of lay education utilizing newspapers and the radio to the fullest extent. Special emphasis should be placed on educational programs in the high schools and colleges of the State. The coöperation of the dental and nursing professions should be enlisted in these educational activities.

26. The Wayne County Medical Society should include more cancer subjects in its lay educational programs.

27. The State Department of Health should continue to publish analyses of vital statistics on cancer and should offer regularly through the publications of its Division of Health Education informative articles on cancer for the laity.

28. There should be developed in the State Department of Health a Division of Cancer Control with personnel and budget to carry out studies in the prevention and control of cancer, the analysis of hospital

records, autopsies, and death certificates, and of other information pertinent to this problem. The director of this division should be a physician having clinical or other experience with cancer problems. Activities of this division should be educational in character and should not enter into the treatment of cancer in any manner.

29. The Michigan State Medical Society should sponsor legislative appropriations sufficient to enable the State Department of Health to carry out the recommendations contained in this report.

30. The State Committee of the American Society for the Control of Cancer should maintain a constructive interest in cancer prevention and control throughout the state. Where needed it should assist in the work of organized tumor services and should coöperate with all health and educational forces. Its members should serve as information centers on cancer problems in their communities. Local committees should be formed when there is need for support of local cancer work.

31. It is believed these recommendations for an improved cancer service in Michigan can be made effective by coöperation of the Michigan State Medical Society representing the clinical and educational phases of medicine, the State Department of Health, and the State Committee of the American Society for the Control of Cancer in a tripartite organization for cancer prevention and control. This coöperative group could so organize facilities of the State that cancer patients would receive adequate treatment in the earliest possible stage of the disease. This organized effort would offer an unexcelled opportunity for undergraduate and postgraduate education in cancer diagnosis and therapy. Its effective working would make unnecessary entrance of any other agency into the field of cancer prevention and control in Michigan. Contributions members of this tri-partite organization would make, and the problems on which they would coöperate, are indicated in the following pages.

32. If and when this report is approved by the Michigan State Medical Society, its publication in full in the official journal of the society is recommended.

33. There is appended to this report a short bibliography of books, journals, and reports on cancer subjects, which is recommended to physicians, medical societies, and

hospitals, as suitable material from which authentic information on cancer can be obtained.

**Program of Tri-Partite Organization for
Cancer Prevention and Control
in Michigan**

A. Michigan State Medical Society.—

1. The Michigan State Medical Society coöperating with the two medical schools in Michigan should further develop the educational program for physicians in Michigan in approved methods of diagnosis, and treatment of cancer and allied diseases.

2. It should coöperate with hospitals and other organizations to see that adequate facilities are available and competent treatment rendered to cancer patients.

3. It should stimulate provision of adequate facilities and trained personnel for examination of all tumor tissues removed in hospitals of Michigan.

4. It should stimulate more autopsies in Michigan hospitals.

5. It should urge its members promptly to refer cases which they do not care to treat to institutions and specialists interested in such cases.

6. It should stimulate better histories and treatment records of cancer cases and obtain more accurate causes of death on death certificates.

7. It should encourage its members to read and discuss papers on cancer subjects at local and state medical meetings.

8. It should supply its members with reliable statistics showing the value of early diagnosis and competent treatment.

B. State Department of Health.—

1. The State Department of Health of Michigan should make surveys to determine the character and extent of the cancer problem within the State as to facilities available for caring for such patients and the actual number of cases and deaths in a manner similar to which information about other diseases is now obtained.

2. It should compile statistics from hospital cancer records by age, sex, organ, type of lesion, and of time elapsing between the patient's first knowledge of the disease and his seeking medical attention.

3. It should assist the Michigan State Medical Society, welfare, and other organizations to make studies of the economic problems of cancer patients in Michigan.

4. In coöperation with the Michigan State Medical Society, it should stimulate provision of proper facilities for examination of tumor tissue and for a larger number of autopsies in hospitals of that state.

5. In coöperation with the Michigan State Medical Society, it should provide informative articles on the cancer problem for distribution to the laity.

6. It should coöperate with the State Committee of the American Society for the Control of Cancer in its work of public education regarding early signs and symptoms of cancer and the value of early adequate treatment.

C. Michigan State Cancer Committee.—

1. This committee should coöperate with the Michigan State Medical Society and the State Department of Health in activities suggested for these two organizations under this tri-partite arrangement.

2. It should assist in education of the public in early signs and symptoms of cancer, the value of early diagnosis and adequate treatment, and where such services can be obtained.

3. It should assist in educating the public to the value of periodic examination as a means of detecting cancer in its early and most hopeful stage.

4. It should educate responsible individuals in Michigan to the value of adequate facilities for the diagnosis and treatment of cancer, and should urge the provision of funds when and where needed to improve existing facilities for the treatment of this disease.

5. It should coöperate with voluntary health and welfare agencies in constructive activities relating to cancer.

6. It should keep fully advised of policies of the American Society for the Control of Cancer, of which it is the local representative, and should avail itself of all facilities the parent society has to offer. It should acquaint the Michigan State Medical Society and the State Department of Health with educational material from the parent society and should keep the Society's Field Representative for that territory fully advised of its activities.

Bibliography

Books

1. Bigelow and Lombard: Cancer and Other Chronic Diseases in Massachusetts. Octavo, 355 pages, 1933, \$4.00. Houghton Mifflin Company, Boston.
2. Ewing, James: Neoplastic Diseases. Octavo, 1127 pages, 1928, \$14.00. W. B. Saunders Company, Philadelphia.

3. Ewing, James: Causation, Prevention, and Treatment of Cancer. Post octavo, 87 pages, 1931, \$1.00. Williams & Wilkins Company, Baltimore.
4. Geschickter and Copeland: Tumors of the Bone. Royal octavo, 709 pages, 1931. American Journal of Cancer, New York.
5. International Cancer Conference at London, 1928: Proceedings. Octavo, 588 pages, 1928, \$12.00. John Wright & Sons, Bristol, England.
6. Kolodny, Anatole: Bone Sarcoma. Royal octavo, 214 pages, 1927, \$5.00. Surgical Publishing Company, Chicago.
7. MacKee, George M.: X-rays and Radium in the Treatment of Diseases of the Skin. Medium octavo, 788 pages, 1927, \$10.00. Lea & Febiger, Philadelphia.
8. Miles, E. Ernest: Cancer of the Rectum. 12 mo., 72 pages, 1926, 12s. 6d. Harrison & Sons, London, England.
9. Norris, Charles C.: Uterine Tumors. 16 mo., 251 pages, 1930, \$3.00. Harper & Brothers, New York.
10. White, William Crawford: Cancer of the Breast. 16 mo., 221 pages, 1930, \$3.00. Harper Brothers, New York.

Journals

1. The American Journal of Cancer. Issued monthly.

- Annual subscription price, \$9.00. Madison Avenue, New York.
2. Bulletin of the American Society for Cancer Research. Issued monthly. Annual subscription price, \$10.00. 1250 Sixth Avenue, New York.

Reports

1. Cancer Survey of Iowa, 1932. Bulletin, December, 1933. (Published by the Department of Health.)
2. Cancer Survey of Kansas, 1933. Bulletin, December, 1933. (Published by the Kansas Medical Society, v. 35, Nos. 7, 8, 9, 10, 11, 12, 1934; Vol. 32, Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 1934.)
3. Cancer Survey of Missouri, 1933. Missouri State Medical Association Bulletin, December, 1933. (Published by the Missouri State Medical Association, v. 32, Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 1934.)
4. Cancer Survey, St. Louis, 1931. Journal of the Missouri State Medical Association, June, 1932, pp. 249-275.
5. Cancer Survey of Wisconsin, 1933. Wisconsin State Medical Journal, September, 1933.
6. Report of the Royal Commission on Cancer and X-rays in the Treatment of Cancer. By John W. S. McCullough, Secretary, Toronto, Ontario.

Medical Diathermy

John S. Coulter, Chicago (*Journal A. M. A.*, Jan. 18, 1936), interprets medical diathermy as the production of heat in the body tissues for therapeutic purposes by high frequency currents, insufficient in amount, however, to produce temperatures high enough to destroy the tissues or impair their vitality. These currents are applied locally by three methods: (1) with contact metal electrodes, (2) with a high frequency alternating electric field, or (3) with a high frequency electromagnetic field. The first method is the one by which conventional diathermy is applied. The frequency of oscillations is usually from one-half million to two million cycles per second. The second method for the local application of high frequency currents is the use of a high frequency electric field. The frequency of oscillations may be from ten million to one hundred million cycles per second. The local part to be treated is placed between two insulated electrodes. The electrodes are not in contact with the skin, as with the conventional medical diathermy electrodes. A towel or piece of felt is placed between the electrodes and the skin to prevent the accumulation of surface moisture into small conducting areas, which might produce burns. In the third method the current is conducted to the patient through a flexible, heavily insulated cable, which is wound around the part to be treated in the form of coils or loops. The part to be treated is separated from the coil or loop by a towel for the same reason noted under the second method. The effects of an electric current when applied to the body tissues may be thermal, chemical or mechanical in nature, depending on the physical characteristics of the current. High frequency currents apparently avoid the mechanical and chemical effects but have the ability to heat the body tissues through which they pass. At the present time it is believed that the local physiologic effects of three methods of applying high frequency currents are limited to the effects of the heat produced. Karsner and Goldblatt state that, when one is inves-

tigating methods used in physical therapy, the opinion of the physician but one can demonstrate. The experiment in therapy is that of a particular form of treatment must be checked in a series of patient with the number of observations must be minimized some of the disadvantages of sampling. The general practice is pleasant and disagreeable circumstances suggested for conventional short wave diathermy practice. Evidence indicates that the local application is effective as an adjunct in the traumatic or inflammatory conditions of joints, bursae, muscles, ligaments, long and short wave diathermy of applying heat and can be used in many of these conditions. The evidence that medical diathermy is more effective than that due to the heat produced should be used only as an adjunct in the conditions mentioned in dealing with the application of diathermy is used, the patient's temperature must regulate the applications of high frequency current indicated (1) in acute inflammatory conditions as acute non-draining cellulitis, erysipelas, and acute pelvic infection; (2) in which there is a tendency to heal as a gastric ulcer; (3) over the appreciation of heat has been in certain peripheral nerve injuries of the abdomen, pelvis or lower part of pregnancy, during menstruation before or after menstruation; (4) there is a suspected malignant disease or injuries in which applying external heat give sa-

President's Page

ENRICH YOURSELVES

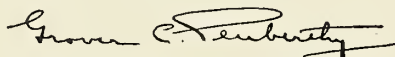
"Thar's Gold in Them Thar Hills!" The Forty-niner (with that conviction) promptly staked a claim! He worked it, and was highly rewarded for his efforts.

Today, Michigan physicians have opportunities for enrichment even more favorable than the California gold-rushers. The claim is already staked for them. The little work necessary is made easy. The results are far more important to the Doctor of Medicine than the acquisition of mere gold.

In Michigan, postgraduate opportunities for physicians are great and of high quality. The conferences and graduate courses offered by the Michigan State Medical Society, in coöperation with the University of Michigan Postgraduate School, cover a varied range of subjects and are conducted by teachers of known reputation and ability. This year's series included courses in Proctology, Gynecology, Obstetrics and Gynecological Pathology, General Practitioners' Course, Genito-Urinary Surgery, Pediatrics, Electrocardiographic Diagnosis, Diseases of Metabolism, Ophthalmology and Otolaryngology, Roentgenology, Laboratory Technic and Medical Military Refresher Course. The attendance at these short, intensive programs was good; however, the per cent of physicians not taking advantage of these refresher courses is still too high.

A remarkable demonstration in medical postgraduate training is conducted each year by the W. K. Kellogg Foundation, which offers courses at famous teaching centers to the 237 physicians located in the seven counties comprising the Michigan Community Health Project (Allegan, Barry, Branch, Calhoun, Eaton, Hillsdale, and Van Buren). Last April, one hundred and eleven doctors were guests of the Kellogg Foundation for two weeks' graduate work at Washington University, School of Medicine, St. Louis. This was a fine attendance. Much good to these physicians and their patients will result.

The future of medicine depends upon the present work and efforts of its practitioners. If physicians, through constant postgraduate effort, continue to give medicine care of good quality, and if, through the wholesome knowledge of the social aspects of sickness, they continue to bring the truth to the people, little need be feared for the future of Medicine.



President of the Michigan
State Medical Society

THE JOURNAL

OF THE

Michigan State Medical Society

PUBLICATION COMMITTEE

A. S. BRUNK, M.D., Chairman.....Detroit
HOWARD H. CUMMINGS, M.D.....Ann Arbor
J. EARL McINTYRE, M.D.....Lansing

Editor

J. H. DEMPSTER, M.A., M.D.
5761 Stanton Avenue, Detroit, Michigan

Medical Secretary

C. T. EKELUND, M.D.
35 W. Huron Street, Pontiac, Michigan

Business Manager

Wm. J. BURNS, LL.B.
2642 University Avenue, St. Paul, Minnesota
or
2020 Olds Tower, Lansing, Michigan

JULY, 1936

"Every man owes some of his time to the up-building of the profession to which he belongs."

—THEODORE ROOSEVELT.

EDITORIAL

BECOME ACQUAINTED WITH YOUR LEGISLATOR

THE medical profession is the guardian of public as well as personal health within the state. Holding, as we do, our licenses to practice from the state, it is our duty to use our professional knowledge and experience in its interests. How can this be done?

Every year the legislature is in session, numerous bills come up for consideration, which have to do directly or indirectly with the health of the people. In the past much legislation has resulted in that which is not in the best interests of the inhabitants owing to the fact that those intrusted with making the laws were not fully informed on the subject. This has been perhaps more the fault of a reticent medical profession than of the lawmakers themselves.

To accomplish the best result, the doctor must exercise his prerogative as a citizen and offer freely his specialized knowledge. We have nothing to ask that affects ourselves personally more than it does any other section of the population. A basic science law, for instance, cannot affect the status of the medical or dental professions. They all meet the requirements of any basic science law standard as it obtains in other

states. So for them its enactment is immaterial. Its passing, however, would raise the standard of all the various cults who may be consulted by sick persons.

Know your candidates for public office. Meet them personally and keep in constant touch with them. See that they are fully informed regarding the merits or faults of any proposed legislation. All this in the interests of public health and a higher standard of medical care.

EXAMINATION FOR INSURANCE

THERE has been an attempt on the part of certain life insurance companies to reduce the fees paid to physicians for making physical examinations of applicants for insurance. The customary fee is small enough when the responsibility assumed by the medical examiner is considered. There is no one act in insuring the life of an applicant that is so important as a thorough physical examination and none which requires greater competence; and yet the fee paid the physician is inconsiderate compared to the agent's commission. The physician stands between the high pressure salesmanship of the agent and the financial interests of the insurance company. The fees for medical examinations should be increased rather than diminished.

Furthermore, information so gained in a medical examination comes under the legal classification of "Privileged communication." In this as in other instances, the physician should refuse to divulge any such information without the patient's or applicant's consent in writing and properly witnessed. This also applies to requests by insurance companies or other organizations or persons who seek access to a physician's private case history records. Under no circumstance, we repeat, should any information be given without the authorized consent of the person concerned.

CORRESPONDENCE

A PROMINENT member of the Michigan State Medical Society writes: "I would think that the JOURNAL could well set up a correspondence department on the order of *Time Magazine* through which to discuss various subjects, such as the matter of insurance examination fees. Many worthwhile tips for procedure might come of it."

JOUR. M.S.M.S.

This JOURNAL has always had such a department which has been used to a varying degree by some members of the profession. We welcome letters on live topics discussed briefly and to the point, and preferably signed by the writers. There has been a standing invitation to use this department as a means of getting one's views before the profession. We repeat the invitation, agreeing as we do with the writer quoted.

PHYSICIANS OF CHARACTER

THE importance of character, which involves the social fitness and adaptability of a physician, cannot be overestimated. There has been a tendency to admit candidates to the study of medicine almost purely on academic standards, the importance of which we would not minimize. At the recent meeting of the House of Delegates of the American Medical Association at Kansas City, Dr. H. A. Luce of Detroit introduced the following resolutions:

WHEREAS, The relationship between physician and patient embodies many factors which must be considered in the determination of an individual's fitness to become a doctor of medicine; and

WHEREAS, The entrance requirements to the degree of Doctor of Medicine cannot be evaluated on a strictly academic basis; therefore be it

RESOLVED, That the House of Delegates of the American Medical Association transmit to the Council on Medical Education and Hospitals the recommendation that entrance requirements to the medical courses of the educational institutions of the United States be conditioned on the character, personality, adaptability, social fitness and motivations of the applicant as well as on his academic training.

As was to be expected, these resolutions met the approval of the House without a dissenting voice.

Apropos of this subject, Dr. Sensenich, president of the Indiana State Medical Society, writes regarding the offices of the old-time preceptor who took the fledgling physician under his wing and by precept and example taught him the art of practicing medicine. Dr. Sensenich goes on to say that medical education was never so thorough as it is today, that hospitals with their highly trained staffs, their facilities for research, study and treatment of the sick, are almost the last word on the subject. In spite of all this, the young graduate, having finished his internship, is cast loose to make his way as best he can. "No one is so alone as the recent medical graduate," says Dr. Sensenich, "expected from the first to play his

part without prompting, away from hospital background and other conditions about which he is not at all familiar."

Dr. Luce's resolutions favor selection of medical students on the basis of character as well as scholarship. Why stop when the student has finished his five or six cloistered years in college and hospital? Dr. Sensenich advises county medical societies to take on a new responsibility. He puts it this way:

"Enforced, prolonged periods before admission of recent graduates to medical societies are not desirable. Recent graduates are, with few exceptions, both qualified and acceptable to society membership and need guidance and encouragement that a well functioning medical organization can provide. In fact, the medical society of the county in which the medical school is located should endeavor to establish contact with the student and interne group. The maintenance of a friendly and helpful relationship during the years of training will tend to insure continuance of a desirable relationship in later years. Organized medicine will need the clear vision, the high ideals, and the sound judgment of these young men who must soon assume the responsibility of leadership."

Dr. Luce and Dr. Sensenich have given us food for thought. Both the college committee whose duty it is to make the selection of the freshman class from the numerous applicants, and the county medical society should become actively aggressive in launching the neophyte physician into his professional career.

TAKING STOCK

THE months of May and June have witnessed a temporary cessation of the number of medical activities; of course, not all. The officers of the county and state medical societies continue their duties the year around. Medical meetings, however, have ceased during the summer months. Now, however, is the time for stock taking. Never was medicine, so far as the county and state medical society and the American Medical Association are concerned, so well organized as at the present. Probably there never was greater activity in the ranks of the profession than during the year just closed. The full time state executive secretary idea has been fully justified. There has been a cohesiveness between the state and county medical society, such as had not been known in former years. A commendable feature during the past months has been "state night" functions given by a number of the

larger societies at which officers of the state medical society together with members of the council were invited guests. These county society meetings have all been well attended and opportunity has been afforded for various officers of the state medical society to give an account of their stewardship to large aggregations of county society members.

A number of officers of the state society have impressed upon the county society the importance of active county society units, and it is evident everywhere that the county society is living up to its duties. As has been said time and again, the county medical society is the basic unit of organized medicine in the United States, and not any larger or smaller group. Everything within reason may be accomplished where there exists one hundred per cent loyalty to the county medical society. This means that membership in any specialist group or hospital staff should not be permitted to obscure one's relation to this basic unit of organized medicine.

The seventy-first annual meeting of the Michigan State Medical Society is scarcely three months away. A large attendance is expected. At this meeting there will be a meeting of the House of Delegates whose members are conversant with the medical problems that confront us all. There should be a full attendance inasmuch as the policies of organized medicine in this state are formulated and it may be redefined at these annual meetings. Now is the time to confer with your delegate if you have anything to contribute to the welfare of medicine.

AUTOMOBILE ACCIDENTS

THE subject of automobile casualties is medical as well as legal. The principal cause of accidents has been set down as excessive speed wherein the driver is not in complete control of his car. The mortality rate of 1935 over 1934 in proportion to the number of automobile accidents shows a seven per cent increase according to statistics compiled by the Travellers Insurance Company.

According to the Travellers report, over 500,000 of 828,000 motor vehicle accidents were due to errors in driving. These errors consist of exceeding the speed limit, driving on the wrong side of the street, or in failing to grant the right of way. A large number of pedestrians walking along rural highways

were killed. Forty thousand children were involved in accidents of whom 1,600 lost their lives. Many pedestrians met their death by failing to exercise proper caution either in walking along the street or crossing the street.

In most accidents, there is a passive and an active factor. The person or automobile that receives the impact is the passive factor, while the driver who is guilty of excessive speed and therefore lack of control of his car is the active factor. In an accident, one suffers damage which is done by the other. The driver who carelessly causes destruction either to a person or to the property of another is culpable and should be dealt with accordingly, if he is not already the victim of his own carelessness.

We have emphasized the importance of common courtesy on the road as a means of diminishing the number of accidents. If the same courtesy were observed on the highway as a well bred person observes in his own home, the number of accidents and the number of fatalities would be greatly reduced. There is a disposition on the part of many drivers to wait until the last minute before leaving for their destination in the hope of making up time on the road. To get up a few minutes earlier and thus obtain an earlier start would obviate the unnecessary speed now indulged in. However, with humanity so constituted, this is probably too much to hope for. We are living essentially in an age of speed, which in turn has deleterious effects on the nervous system. Unless drivers learn the lesson of self-control, the time will come when applicants for drivers' licenses will be required to come before a board of psychiatrists whose duty it will be to deny the privilege of driving to the mentally unstable. It is somewhat inconsistent to work towards public health and at the same time permit the maiming and slaughtering of thousands of people to go on year after year.

MICHIGAN FINANCES

"Knowledge that the State of Michigan will end its fiscal year not only with a balanced budget but also with a considerable surplus in its treasury is a matter for solid satisfaction.

"Two things have been important factors in making this happy condition possible.

"Business recovery and increase of customer purchasing power have brought about a large increase in tax revenues.

The state has enjoyed a businesslike, frugal ad-

ministration in Lansing which has resisted temptation to swerve from a policy of good economy.

"Governor Fitzgerald has seen in the larger inflow of tax money an opportunity to get Michigan on a solid financial basis instead of an opportunity to splurge.

"While he has moved to bring about necessary rehabilitation of government activities and institutions, free and easy spending remains distinctly 'out.'

"As a result, the taxpaying public, which in these days includes everybody who eats and sleeps, has a right to hope for an actual decrease in taxation within a reasonable time.

"The situation is one for which the people of Michigan should be thankful and grateful"—*The Detroit Free Press*.

This is certainly surprising news to the medical profession of Michigan, who are asked to render medical and surgical care to afflicted indigents at \$1.00 per.

In Honor of Editors

It is a pity that editors cannot praise editors. They can praise prophets, poets, publicists, preachers, but they cannot praise or do honor to editors. They must not blow one another's trumpet. It is a pity, because they deserve to be held in honor.

Too often are they made the theme of idle jest. Who does not remember the man in J. M. Barrie's book who dreamed that he was in a newspaper office and remarked to a colleague as he descended the stairs: "I have killed the editor," to be met by the calm reply, "Then you ought to be ashamed of yourself." Afterwards, in a dream, he was tried for his deed and left the court without a stain on his character.

Such trifling with a noble order I wholeheartedly condemn. For what is the editor? He is it who stands on the threshold and admits this and rejects that. He is the selector by whose judgment we are all unconsciously guided. He is also the conductor of the orchestra and the conductor can make of a score either a dirge or a joyful sound. What power is committed to his hands as he sifts and arranges and shortens! What courage he needs! No good editor, except for a brief time, sits on the fence; but it takes no little courage to come down! What sublime indifference must be his to "Indignant Reader" and "Departing Subscriber"! What wisdom, foresight, ingenuity, balance must be shown by this man!

—*The Christian Century*.

Medicine Taboos Latin

Straighter and narrower grows the path of the modern expert who "knows more and more about less and less," and in pursuit of that necessary concentration, Sydney University is the latest seat of learning to make Latin no longer a compulsory subject for students of medicine. But it is rightly pointed out that the change will not interfere with the drafting of prescriptions in Latin, which involves an acquaintance with words and phrases rather than with grammar and classical authors. That will possibly be a source of comfort to the patient; put his prescription into plain English instead of dog-Latin done up into abbreviated forms and he might doubt whether he was getting sufficiently effective treatment. In Lancashire insured patients have a notorious passion for "a bottle,"

even though it be only what the doctor, in his approved dead language, would describe (but not to the patient) as a "placebo" or preparation intended to comfort rather than to cure. What the bottle is to one type of patient the dog-Latin may be to another; it belongs to the established order of things and the very look of it inspires confidence. Once upon a time that thought was not absent from the doctor's own mind; that large "R" with the crossed tail which begins his prescription may now be interpreted as "Recipe" or "take," but it was once uncommonly like the astrologer's sign for Jupiter, whose blessing upon the formula was apt to be invoked by mediæval physicians. In any event, "Fiat haustus" is more impressive than "Let a draught be made," and how greatly a mere spoon rises in dignity by being described as "cochleare" or just "coch." (so-called from its resemblance to the "shell of a snail," which it does not nowadays resemble at all). Let the Latin go, but let the jargon be preserved, even as the doctors of Athens were expected to write their prescriptions in the Doric dialect because Doric medical schools had formerly been famous.—*Manchester Guardian*.

The Clinician's Function in Medicine

THE RT. HON. LORD HORDER
London, England

Now the clinician's criteria are, in general, less exact than the pathologist's, nor can they be made so exact very easily; but if they are made severe, as they should be—if nothing is termed positive which is only doubtfully positive; if the clinician's judgment concerning his observations is controlled by reliable technic; if discovered identities are unequivocal—then the clinician's "facts" are as scientific and as logical as are those of the pathologist. The truth is that clear-thinking, with forbearance, is essential to the satisfactory solution of a diagnostic problem whether the contribution comes from the laboratory or from the bedside.

There is a technic of the mind as well as of the eye and of the hand, and the former is quite as essential as the latter. It is not only what you find *at* the bedside, it is also what you bring *to* the bedside that matters. The eye sees what it takes with it the power of seeing; in other words, it is the *mind* that sees. And surely it is the same in the laboratory. In both spheres there comes to some—slowly, painfully, towards the end (alas!)—facility born by patient practice out of time. Clinician and pathologist are more akin than they sometimes realize. Each of them takes a pride (which the other regards as excessive) in his small discoveries, and each of them lacks humility (or so the other thinks) in face of the certain fact that every day, whether it be in the ward or in the laboratory, momentous things are happening under their very eyes, yet they see them not, for they are both under the same ban—they cannot live in advance of their generation.

Read at the Annual Meeting of the Medical Society of the State of New York, New York City, April 28, 1936.
From the *New York State Medical Journal*.

Reared Frequently

A negro mammy had a family of well-behaved boys. One day her mistress asked:

"Sally, how do you raise your boys so well?"

"Ah'll tell you, missus," answered Sally. "Ah raise dem wid a barrel stave and Ah raise 'em frequently!"—*Exchange*.

DEPARTMENT OF SOCIETY ACTIVITY

C. T. EKLUND, M.D., Secretary

COUNCIL CHAIRMAN'S COMMUNICATION

THE Governor's Executive Order of June 4, 1936, with reference to afflicted and crippled children, does two things:

1. It makes official the Filter System.
2. It requires that sworn affidavits regarding economic condition be made by the parents or guardians of the children for whom medical treatment, paid for by the taxpayer, is requested.

The executive Order of Gov. Frank D. Fitzgerald is as follows:

WHEREAS, under the provisions of Act 256 of the Public Acts of Michigan, 1935, the sum of \$1,400,000 was appropriated for the medical, surgical and hospital treatment of indigent children, both afflicted and crippled, for each of the fiscal years of the state ending June 30, 1936, and June 30, 1937.

AND WHEREAS, under the provisions of Acts 169, 207 and 208 of the Public Acts of 1935, the demands upon said appropriation are greatly in excess of the amount made available by the Legislature, and the bills would cause an overdraft which is estimated will amount to more than half a million dollars on June 30, 1936,

AND WHEREAS, the Michigan Association of the Judges of Probate on or about October 30, 1935, recommended the appointment in each county of a Filter Board, consisting of a Medical Committee, of not less than three physicians, and an Economic Committee, to investigate and report to the courts the medical and economic conditions affecting such indigent child patients,

AND WHEREAS, the demands made upon this fund in the past, and those which appear likely to be made in the future, make it necessary to have each case scrutinized closely from both the economic and medical standpoints,

AND WHEREAS, during the past ten months the medical profession of the state has given its services generously without compensation, no matter how serious the illness or how long continued the treatment, but who are entitled to fair and reasonable compensation.

THEREFORE, having in mind the best interests of the deserving and worthy afflicted and crippled children whose health is security for the future good citizenship of the state, and in order that the limited appropriation may go as far as possible toward the care of urgent and necessary cases;

IT IS ORDERED, that no state money shall be paid for the care and treatment of afflicted or crippled children until there has been filed with the Judge of Probate a statement by a parent or legal guardian, under oath and approved by the Economic Committee, giving fully the economic condition of the parents or guardians of said children, including the details of property owned and income received by all members of the family, and such other information as such Economic Committee requires—and until there shall have been a physical examination by said

Medical Committee of said Filter Board, with a report thereof, in plain terms, filed with the Judge of Probate. If the Judge of Probate makes an order for the medical and/or surgical treatment, bills rendered to the state therefor shall be accompanied by certified copies, from the Judge of Probate of the county, of both the Economic Committee report and the Medical Committee report.

THIS ORDER shall apply only to services rendered on and after July 1, 1936, the date of the commencement of the fiscal year of the State of Michigan ending June 30, 1937.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Great Seal of the State of Michigan to be affixed, this 4th day of June, A. D. 1936.

(Signed) FRANK D. FITZGERALD,
Governor.

By the Governor: (Signed) ORVILLE E. ATWOOD,
Secretary of State.

New forms for use of the Filter Boards have been developed by the Auditor General who sought the advice of the Michigan Association of Probate Judges and the Michigan State Medical Society on same. One form will be for the Economic Committee; a second form has been devised for the Medical Committee of the Filter Board. These will be supplied by the Auditor General.

The Executive Office of the State Society is receiving numerous requests for information relative to the above from County Poor Commissioners, Superintendents of the Poor, and other public officials located in the various counties. I would urge that the officers and also the members of public relations committees of county medical societies immediately contact all officials and laymen having to do with the operation of these laws and present them with full information on the Governor's Executive Order, the new forms, and the benefits to be derived from active coöperation between the officials and the medical group in each county. The public should be taught that a medical program will be successful only when the medical profession is invited to coöperate and coördinate the work. When laymen ignore the medical profession and attempt independently to run a highly technical project dealing with people's health, invariably it is a failure, resulting in damage to both the people's morale and government's pocket book.

The people must know that medical and

JOUR. M.S.M.S.

surgical services are indefinite scientific services measured in nature and amount according to the demands of the individual. Medical service, therefore, is not comparable to commodities sold by units of measure and weight which are always constant. This is a fact which you as physicians must give to the public, especially those in official positions. When the elective officer, who has something to do with supplying medical service to the people, realizes this and other important facts known to physicians, and acts accordingly, then are we sure that his efforts will be successful and the people will receive the service indicated.

Coöperate with official groups, coördinate their health programs, and bring the best medical service to the people.

HENRY COOK, M.D.

ANNUAL SESSION

September 21-24, 1936—Detroit

THE program for the Annual Session is practically complete. We believe we are safe in saying that there has never been a better one. Furthermore, we doubt if a more intensive and well rounded two days of postgraduate study could be planned. We are saving complete data for later communications to you, but to whet your appetite we will mention a few of the highlights. Invited guests include:

GEORGE M. CRILE, M.D., of Cleveland, who will speak on the nature of essential hypertension and review his recent research in this field.

DEAN LEWIS, M.D., of Johns Hopkins University, who will discuss "Hormones in Relation to Tumor Growth."

FRED WISE, M.D., of New York City, and C. S. O'BRIEN, M.D., of Iowa City, who will discuss Dermatology and Ophthalmology, respectively, with relation to General Practice.

GEORGE HERRMANN, M.D., of Galveston, Texas, who will present some clinical studies on the action of various types of Diuretics.

EMIL NOVAK, M.D., of Baltimore, Md., who will talk on the Endocrines in Gynecology and Obstetrics.

These are some of the invited guests from outside the state. The Section Meetings will be carried on by outstanding men from our own society, most of whom are in Detroit. The Detroit men are bending every effort to put Medicine on the map once and for

all in their fair city. There will be discussions on Treatment of Pneumonia; Treatment of Duodenal Ulcer; Treatment of Diabetes with Newer Forms of Insulin; Treatment of Complications of Pregnancy; Symposia on Acute Abdominal Disturbances, on Allergic Diseases, on Cancer of the Lung, on Vascular Accidents, to mention a few.

Section meetings will be held in hospitals in the morning. Bus transportation will be provided to and from the hotels. You can park your car and leave it for the duration of your stay and ride the special busses with the rest of us.

Demonstrations of special interest will be held at Receiving Hospital on Wednesday and Thursday. On Wednesday Dean Lewis, of Baltimore, will tell you how to properly handle your accident cases, how to suture nerves and tendons, and will discuss traumatic surgery in general versus "chromatic" surgery. On Thursday morning the Orthopedic Service at Receiving Hospital will present a most valuable demonstration of the treatment of fractures. With the growing incidence of automobile accidents on our highways these two special demonstrations alone should make the trip worth while for many physicians of this state.

By way of entertainment there will be golf Tuesday afternoon at the Detroit Golf Club, followed by a golfers' dinner. In the evening we are to be privileged to have Dr. Charles Gordon Heyd, of New York City, vice president of the American Medical Association, speak to us, and following this the Wayne County Medical Society has arranged a very excellent program of entertainment to be concluded with "refreshments."

Keep these dates open. Plan now to attend, and watch for the complete program. You will find more than you expect.

CHILDREN'S FUND OPENS CLINIC AT TRAVERSE CITY

ON Wednesday, June 24, dedicatory ceremonies were held in Traverse City for the new Children's Clinic established by the Children's Fund of Michigan. Senator James Couzens delivered the principal address of the afternoon and spoke again in the evening at a civic dinner honoring him sponsored by the Traverse City Chamber of Commerce. Other speakers at the afternoon and evening sessions were:

The Honorable William F. Gallagher,

Chairman of the State Hospital Commission
Dr. James D. Bruce, Vice President of the
University of Michigan

Dr. Hugo Freund, President of the Children's Fund of Michigan

William J. Norton, Executive Vice President of the Children's Fund

Judge Ruth Thompson, Probate Judge of Muskegon County

Congressman Albert J. Engel, of Lake City.

Senator Couzens in his address said that the clinics are founded on five considerations:

1. Giving the rural child the same chance for adequate medical care as the urban child.
2. To make possible long observation in the hospital of certain juvenile cases requiring prolonged study.
3. To avoid the long transportation problem to Ann Arbor.
4. To provide training centers for medical men and nurses.
5. To develop methods and facilities which can be used by other child health agencies.

Senator Couzens is quoted by the *Traverse City Record-Eagle* on Wednesday, June 24, as follows:

"We choose to locate each clinic adjacent to some well established, well operated general hospital in order to save ourselves the necessity of building additional hospital beds. Munson Hospital was selected here not only because it is well planned and well equipped but also because of the fine spirit of coöperation on the part of Doctor Sheets and his staff, by the men of the medical profession in this vicinity, and by the people who reside here. We hope, in due time, when the knowledge of the benefits to be secured, has spread, to serve all the children in need who reside north of the mythical line between Bay City and Muskegon, and south of the Straits of Mackinac. This may only be done through the friendly interest and encouragement of Probate Judges, superintendents of schools, teachers, welfare officers, nurses, medical men and parents."

AFFLICTED-CRIPPLED CHILD CONFERENCE

The Finance Committee of the State Administrative Board, of which Auditor General John J. O'Hara is chairman, has invited the Michigan State Medical Society to send representatives to its meeting of July 20 in Lansing, at which medical fees for the care of crippled and afflicted children under the two State laws will be discussed. It is believed that a definite plan for the balance of 1936 will be worked out at this session. Announcement of the results of this important conference will be sent to all county medical societies immediately after the meeting.

COUNCIL AND COMMITTEE MEETINGS

1. **May 3, 1936**—Maternal Health Committee. Olds Hotel, Lansing—10:00 A. M.
2. **May 7, 1936**—Radio Committee—Wayne County Medical Society, Detroit—12:00 noon.
3. **June 3, 1936**—Subcommittee of Special Contact Committee to Governmental Agencies. Governor's Office, Lansing—11:00 A. M.
4. **June 5, 1936**—Subcommittee on Relief Medicine. Statler Hotel, Detroit—6:30 P. M.
5. **June 10, 1936**—Executive Committee of Advisory Committee on Postgraduate Education.—Michigan Union, Ann Arbor—12:00 Noon.
6. **June 10, 1936**—Public Relations Committee—Statler Hotel, Detroit—4:00 P. M.
7. **June 10, 1936**—Preventive Medicine Committee. Statler Hotel, Detroit—4:00 P. M.
8. **June 10, 1936**—Joint meeting of Preventive Medicine Committee and Public Relations Committee with State Health Commissioner. Statler Hotel, Detroit—7:00 P. M.
9. **June 12, 1936**—Subcommittee of Special Contact Committee to Governmental Agencies.—Probate Court, Flint—10:00 A. M.
10. **June 14, 1936**—Contact Committee with Michigan Crippled Children Commission. Olds Hotel, Lansing (two sessions, Sunday and Monday).
11. **June 19, 1936**—Section Officers, and the Scientific Exhibits Committee. Statler Hotel, Detroit—6:30 P. M.
12. **June 22, 1936**—Chairmen of Detroit Committees on Arrangements for 1936, Annual Meeting. M. S. M. S.—Wayne County Medical Society, Detroit—12:00 Noon.
13. **June 24, 1936**—Legislative Committee. Wayne County Medical Society Bldg., Detroit—6:30 P. M.
14. **July 1, 1936**—Executive Committee of The Council, Statler Hotel, Detroit—6:30 P. M.

MINUTES OF MEETING OF EXECUTIVE COMMITTEE OF THE COUNCIL

May 22, 1936

1. *Roll Call.*—The meeting was called to order by Dr. Henry Cook, Chairman, at 7:10 p. m. in the Statler Hotel, Detroit. Those present were Drs. Cook of Flint; A. S. Brunk and H. R. Carstens of Detroit; and T. F. Heavenrich of Port Huron. Also present: President Grover C. Penberthy, Detroit; Dr. James H. Dempster, Detroit; Dr. L. Fernald Foster, Bay City; Drs. H. A. Luce, S. W. Insley of Detroit; Dr. J. H. Burley of Port Huron; Dean Raymond B. Allen of Wayne University College of Medicine, and Executive Secretary Wm. J. Burns. Absent, Dr. C. E. Boys, Kalamazoo.
2. *Minutes.*—The minutes of the meeting of April 22, 1936, were read and approved. Dr. Cook reported that he had written the Crippled Children Commission re the radiologists' complaint. A copy of the letter was ordered sent to Dr. John B. Jackson of Kalamazoo.

3. *Practice of Medicine by Osteopaths.*—A report from Attorney Barbour on the Wayne County case was read and ordered placed on file. Dr. Dempster presented an article on this subject for insertion in *THE JOURNAL*, which was read and referred to the Legislative Committee.
4. *Relief Medicine and Afflicted-Crippled Child Laws.*—Dr. Cook read a letter from Dr. R. G. Tuck of Pontiac re proposed survey of medical relief to indigents, which was discussed thoroughly. The matter was referred to the subcommittee on Relief Medicine.

Dr. Insley stated that the report of his Subcommittee will not be ready for some three or four months, as the material and nature of the survey do not permit of report at an earlier date. The Subcommittee on Relief Medicine will meet in Detroit on June 5, 1936.

Discussion brought out that the county medical societies desire some information on the status of afflicted-crippled child fees. Motion of Drs. Brunk-Heavenrich that the Special Committee (Drs. Penberthy, Cook, Cummings, Foster and Insley) arrange a meeting with the Governor to discuss this and other matters, and to prepare a statement for publication relative to fees for care of afflicted-crippled children. Carried unanimously. Meeting arranged for Wednesday, June 3, 10:30 a. m., Lansing.

Dr. Tuck's suggestion that the M. S. M. S. line up with hospital groups, nurses, morticians, druggists, etc., was referred to the Liaison Committee.

Report was given on the State's earmarking \$100,000 for crippled children care for the year beginning July 1, 1936, in order to qualify for a like sum from Social Security funds.

5. *From the Public Relations Committee.*—

- (a) Tuberculosis Division in State Health Department. Dr. Foster presented this matter and stated that the PRC and PMC are endeavoring to arrange a meeting in Detroit on June 10 with State Health Commissioner C. C. Slemons, Mr. T. J. Werle, Dr. E. J. O'Brien, and Detroit Health Commissioner Henry F. Vaughan for a further discussion of this matter.
- (b) County Health Units.—Dr. Foster presented for approval the new rules for operation or administration of county health units, and requested permission to include same in PRC Letter No. 3. Motion of Drs. Carstens-Brunk that these rules be approved and be included in PRC Letter No. 3. Carried unanimously.
- (c) Affidavits. Dr. Foster presented the WCMS recommendation that the application forms for the admission of afflicted-crippled children to free medical attention should contain a sworn affidavit relative to the financial standing of the applicant. This matter was referred to the Special Committee which is interviewing the Governor.
- (d) Unity in the Profession. Dr. Foster read the PRC minutes relative to allegiance in matters of policy to the county medical society. Motion of Drs. Brunk-Heavenrich that the Executive Committee of The Council concur in the resolution as adopted by the PRC, to include: "That in all

matters of policy, allegiance shall be to the county medical Society." Carried unanimously.

6. *Meeting with Social Workers.*—The Executive Committee discussed closer relations with the Michigan Conference of Social Work. It was suggested that Dr. Wm. Haber, Mr. MacLellan and Mr. Fred Johnson be invited to meet with the Executive Committee of The Council for an interchange of ideas. This joint session could be held at 3:00 p. m. on the day when the Executive Committee planned to hold its regular meeting at 6:30 p. m. This matter was left to Drs. Penberthy and Insley to arrange the meeting.

7. *Membership and Journal Report.*—Paid membership to date is 3,079 members compared to 2,919 last year.

THE JOURNAL income for May was \$733.42; printing costs were \$723.25. Bills payable for the month were presented, including item of \$105 due Dr. S. W. Insley for advances of salary to investigator of Subcommittee on Relief Medicine. Motion of Drs. Brunk-Heavenrich that the financial report be accepted and placed on file and that the bills as presented be ordered paid. Carried unanimously.

8. *Admission Policy at U. of M. Hospital.*—Dr. Cook reported that he had contacted Dr. J. D. Bruce relative to this matter who had suggested that a committee study same. Motion of Drs. Carstens-Brunk that the President and the Chairman of The Council be authorized to appoint a committee to contact the University Hospital to make such a survey, taking into consideration recent reports on this subject. Carried unanimously.

9. *Resolutions on Death of Dr. C. F. Moll* were referred to the House of Delegates. It was suggested that the Speaker of the House of Delegates appoint a committee to draw up appropriate resolutions.

10. *Progress of Annual Meeting.*—The Executive Secretary gave a report on progress of arrangements for the Annual Meeting in Detroit next September. The Executive Committee authorized opening of the exhibits to the public on Tuesday afternoon, September 22.

11. *Matter of Ethics.*—The rumor of unethical conduct of two physicians in the Seventh Councilor District was discussed. Motion of Drs. Carstens-Brunk that the particular county medical society in which these physicians reside should be written and asked to investigate the matter and send in a report. Carried unanimously.

The Executive Committee authorized an announcement in *THE JOURNAL* relative to this alleged unethical conduct.

12. *Refresher Courses.*—Report was given that State Health Commissioner Slemons had allocated \$1,500 from Social Security funds to the fund administered by the Advisory Committee on Postgraduate Education.

13. *Cancer Quackery.*—A letter from the Texas State Board of Medical Examiners relative to a certain cancer quack was read. The Executive Secretary was instructed to furnish the Texas Board with the Detroit court record of this man, and to refer the Texas letter to the Michigan State Board of Registration in Medicine.

14. *Surveys of Social Aspects of Sickness.*—The recent letter and questionnaire as sent out by Dr. Ralph H. Pino, Chairman of the Medical Economics Committee, was discussed by Chairman Cook. Copies have been sent to each member of The Council. Dr. Cook felt that integrating these studies in every county medical society should be the responsibility of the Councilors. The Executive Committee felt that Dr. Cook should so inform each Councilor and directed him to see that the survey is made and that report is given to the M.S.M.S. by August 1, if possible.
15. *Adjournment.*—The Chair thanked all for their attendance and helpful advice and adjourned the meeting at 11:20 p. m.

MINUTES OF MEETING OF LEGISLATIVE COMMITTEE

May 23, 1936

1. *Roll Call.*—The meeting was called to order by Dr. H. H. Cummings, Chairman, at 9:00 p. m. at his summer home in Washtenaw County near Ann Arbor with the following present: Dr. Cummings of Ann Arbor, Dr. F. B. Burke of Detroit, Dr. L. G. Christian of Lansing, Dr. Henry Cook of Flint, Dr. L. J. Garipey of Detroit, Dr. C. F. Snapp of Grand Rapids, and Dr. H. E. Perry of Newberry. Also present: President Grover C. Penberthy of Detroit, Dr. L. Fernald Foster, Bay City, and Executive Secretary Wm. J. Burns.
2. *Minutes.*—The minutes of the meeting of April 25 were read and approved.
3. The activities and reports of the subcommittees were discussed and accepted, on motion of Drs. Snapp-Christian.
4. *Legislative Committee Exhibit.*—Dr. Garipey presented his plans for the exhibit at the Annual Meeting in Detroit next September. Inasmuch as the PRC will work with the Legislative Committee on this exhibit, the Chair added Dr. L. Fernald Foster to the subcommittee (Drs. Garipey, Snapp, Ekelund, Foster).
5. *Contact work with County Medical Societies.*—Dr. Christian spoke of his meeting with the Ionia-Montcalm Society in which he had started educational work. Dr. Cook felt we must start plans now, through contact with county medical societies, to see that good laws protecting the people's health are not tampered with at the next session of the Legislature.
6. *Adjournment.*—The Chair thanked all for attending this meeting. Dr. Cook expressed the sentiment of the group in expressing gratitude for Dr. Cummings' hospitality. The meeting was adjourned at 11:20 p. m.

MINUTES OF MEETING OF MEDICAL ECONOMICS COMMITTEE

May 27, 1936

1. *Roll Call.*—The meeting was called to order by Dr. Ralph H. Pino, Chairman, at 2:00 p. m. in the WCMS Building, Detroit. Those present were Dr. Pino of Detroit; Dr. S. W. Insley, Detroit; and Dr. W. H. Marshall, Flint. Also present: President Grover C. Penberthy, De-

troit; Dr. Roy H. Holmes, Muskegon; Dr. Henry Cook, Flint; Dr. E. G. Krieg, Detroit; Dr. Wm. E. Miller, Detroit; Dr. V. L. Van Duzen, Detroit; Dr. A. G. Armstrong, Detroit; Dr. Ray S. Morrish, Flint; Dr. Geo. V. Conover, Flint; Dr. T. K. Gruber, Detroit; Dr. F. B. Burke, Detroit; Dr. E. W. Bauer, Hazel Park; and Executive Secretary Wm. J. Burns. Absent: Dr. F. A. Baker, Pontiac; Dr. H. F. Becker, Battle Creek; Dr. E. I. Carr, Lansing; Dr. G. A. Seybold, Jackson; Dr. Ferris Smith, Grand Rapids.

2. *Minutes.*—The minutes of the meeting of March 22 were read and approved.
3. *Insurance Examination Fees.*—Dr. Pino read extract from House of Delegates deliberations at 1935 meeting re insurance examinations. Dr. Holmes presented the Muskegon experience which resulted in the cementing of allegiance to the county medical society. Discussion brought out that a permission slip from the patient should be required by the physician who is asked to divulge a confidential communication. Dr. Insley suggested that a subcommittee be set up to work on this subject until the MSMS Annual Meeting in September, with Dr. Holmes as Chairman, so that proper information to physicians throughout the state could be given. The Committee decided this suggestion should be carried out; also that THE JOURNAL should carry a story on the work of this subcommittee and the fairness of the fee for the examination work involved. Subcommittee: Drs. Holmes, Armstrong, Miller, and Van Duzen. It was recommended that the attention of the profession be called to the House of Delegates' resolution re insurance (passed at the Kalamazoo meeting), and the danger of malpractice suits in giving out confidential communications without written authority from the patient.
4. *Industrial Medicine.*—Dr. Pino explained the background of the appointment of the subcommittee on industrial medical practice and called upon Dr. Marshall, who spoke of the Endicott-Johnson and Goodyear experiments; he stated these will spread and the sooner we know all the implications, the better we can insist on the traditional family physician-patient relationship. We should be ready. This is an industrial state with a gradual increase of industrial medicine involving the general practice of medicine. This is a big study. Dr. Krieg stated that Section VI of the Medical Economics Commission, WCMS, is approaching the matter from the compensation standpoint, studying, for example, the New York law and experience; July 1 will end the first year under this law. Section VI contacted the medical profession of Wayne County by questionnaire. General discussion ensued. It was suggested that an approach could well be made by a joint commission representing the State Medical Society, industry, and labor organizations. The matter was left to the Medical Economics Committee to plan a study, and to try to get a physician who can devote sufficient time and energy to this important matter.

5. *Postgraduate Committee.*—Dr. Pino reported that this subcommittee of the Medical Economics Committee had met twice recently but must have more time to formulate its conclusions. Dr. Cook was of the opinion that the problem of Distribution of Medicine is a most important subject and should be constantly brought to the attention of every practicing physician.

6. *Medical Relief*.—Dr. Insley reported on the work of his Subcommittee on Relief Medicine:

- (a) Cost of distribution of medical care survey is still going on;
- (b) Analysis of state poor laws and the medical aspects of the Social Security Act is not yet complete; this will cost further money to complete;
- (c) Recodification of State poor laws; in this there are two schools of thought: Those who favor a continuation of the ERA, and those who believe that local authorities should handle this. (Last year the Economics Committee favored continuation of the ERA.)

Re supplementary medical aid, there are also two schools of thought: Those who favor this as necessary; and those who do not desire government to aid the borderline case, feeling that a postpayment plan is to be preferred.

Dr. Insley will continue with his surveys; his Subcommittee will meet on Friday, June 5, 1936, Statler Hotel, Detroit.

7. *Rural Medicine*.—The Committee discussed adequacy of rural medicine, and the necessity for county medical societies to study their own economic problems and to send their findings to the State Society for integration throughout the 53 county medical societies. Dr. Pino presented letter and proposed subjects of study which had recently been sent to all county medical societies, urging a survey of local problems touching the social aspects of sickness.

8. *Practice of Medicine by Corporations*.—A letter from Herbert V. Barbour, Attorney for the Medico-Legal Committee, relative to opinion of Justice Wilson of the Illinois Supreme Court and the opinion of Judge Goodell of California Supreme Court holding definitely that a corporation cannot practice medicine, was read.

9. *Group Hospitalization*.—A letter from Dr. F. B. Miner of Flint re group hospitalization was presented to the Committee. Dr. Miner urged a definite postpayment plan as an improvement over hospital insurance. This is the subject of discussion of the evening session of this Committee, so action was deferred pending further information on the matter. Recess for dinner, 5:35 to 7:30 p. m.

Group Hospitalization in Cleveland.—At the second session of the Medical Economics Committee, all who were present at the first session answered to roll call. Also Dr. E. I. Carr, Lansing; Drs. A. H. Whittaker, L. J. Hirschman, C. E. Umphrey, D. I. Sugar, B. R. Sumner, J. R. Boland, W. P. Woodworth, G. L. McClellan, S. G. Myers, Wm. E. Johnston, Mr. J. A. Bechtel and Mr. Harry Lipson, all of Detroit.

Mr. John A. McNamara of the Cleveland Hospital Service Association spoke on "Group Hospitalization in Cleveland." Sixteen hospitals have organized a non-profit corporation to supply hospital care to employed subscribers. In 21 months, 27,000 employed subscribers and 4,000 family members have been enrolled. These include railroad employees, policemen, firemen, employees of the city departments, 3,500 school teachers, employees of banks, department stores,

and 180 factories. There is no age limit of employed subscribers. The plan is run by the hospitals, and was approved by the Academy of Medicine after a ballot by mail. Payroll deductions are used. Subscribers are eligible to a maximum of 21 days' hospital care each year, which time limit takes care of 97% of the cases, according to Mr. McNamara. No discount for a greater number of days. Subscriber may go to any one of the sixteen hospitals, but only upon the recommendation of his own physician. The plan does not include the physician's bill. It does not include maternity cases, T. B. cases, mental cases, contagious cases, compensation cases. Nineteen hundred people have received service in 21 months; \$92,000 in hospital bills has been paid; the association has a reserve of \$38,000, or \$1 per person per year. This surplus warrants the addition of new features such as more hospital days than 21, or convalescent care, or a lessened rate (new features must have the approval of the Academy of Medicine, and two-thirds of the subscribing hospitals.) The committee in charge of the Association, called a board of trustees, is composed of 21, 18 are trustees of the hospitals, two from the Academy of Medicine, and one from citizens at large. Expenses are less than 9%. Hospitalization averages 8.3 days per person. Two rates are used: the subscriber pays 60c per month and receives ward-bed accommodations for which the hospital is paid \$4.50 per day; or the subscriber pays 75c per month for which he gets semi-private accommodations, and the hospital is paid \$6.00 per day. Proper legislation is a requisite to a good group hospitalization program; all such plans should be under the supervision of the Insurance Department of the State, as the greatest menace is the independent commercial scheme. After the payment of the first premium by the subscriber, under the Cleveland plan, there is no waiting period.

Radiologists: If the Roentgenologist interprets the x-ray plate, he has the right to charge patient for same. Mr. McNamara stated there was one employed radiologist in the 16 hospitals in Cleveland included in the Association. He felt the problem of the employed radiologist is one for the medical profession to solve and called attention to the Principles of Ethics of the A. M. A., Article VI, Section 4.

Definition of "family group": A subscriber may bring in members of his family at a reduction of 50% on the regular rates, for which he receives a 50% discount on hospital charges up to 21 days.

Mr. McNamara insisted that this was not hospital insurance, but assurance to the hospitals. There is no upper-salary limit. The unemployed and borderline cases who cannot pay premiums are not in this group hospitalization plan. Mr. McNamara listed as advantages to the physician the following: (1) The physician receives his fee more quickly when the hospital bill is out of the way. (2) Group hospitalization covers unexpected illnesses. (3) People who need elective work will go to the hospital more quickly. (4) The Cleveland Plan keeps commercial organizations, which would include the physicians' fee on a cut-rate basis and limited to a small group of physicians, out of the field.

A vote of thanks was extended to Mr. McNamara for the above explanation. The meeting was adjourned at 9:20 p. m.

MINUTES OF MEETING OF PREVENTIVE MEDICINE COMMITTEE

June 10, 1936

1. *Roll Call.*—The meeting was called to order by Dr. L. O. Geib, Chairman, at 5:15 p. m. in the Statler Hotel, Detroit. Those present were Dr. Geib, Detroit; Dr. A. L. Callery, Port Huron; Dr. R. B. Harkness, Hastings; Dr. Shattuck W. Hartwell, Muskegon; Dr. J. J. O'Meara, Jackson; and Dr. Milton Shaw, Lansing. Also present were Secretary C. T. Ekelund, Pontiac; Dr. E. J. O'Brien of the State Sanatoria Commission, Detroit; and Mr. Clare Gates, Field Secretary of the Joint Committee on Public Health Education, Ann Arbor. Absent were: Dr. Alfred La Bine, Houghton; and Dr. R. M. McKean, Detroit.
2. *Minutes.*—The minutes of the meeting of December 9, 1935, and the minutes of the joint meeting of the Preventive Medicine Committee with the Maternal Health Committee and the Michigan State Department of Health April 1, 1936, were read and approved.
3. *Maternal and Child Health.*—Dr. Callery reported on activity of the public health nurses in St. Clair County and the set up of the St. Clair County Medical Society with regard to same. It was suggested that the Advisory Committees, appointed by the various county medical societies to work with these nurses, should report to the Preventive Medicine Committee. It was also brought out that standardization of instruction to the nurses is to be desired.
4. *Time of Meetings.*—Motion of Drs. O'Meara-Shaw that the meetings of the Preventive Medicine Committee be held on Thursday in the future. Carried unanimously.
5. *Red Cross First Aid Service.*—Dr. Geib read correspondence with the American Red Cross relative to Red Cross emergency first-aid stations. Dr. Ekelund explained fully the workings of this proposed activity of the American Red Cross. General discussion ensued in which it was brought out that physicians are generally available within a few minutes at the scene of the accident and if not, police officers and ambulance drivers are available; the latter group are frequently the first to arrive with or without a physician having been called. The practical means of improving first-aid treatment to the accident victims can best be accomplished by improvement of our existing facilities. This requires training of police officers and ambulance drivers and the public in first-aid treatment and will accomplish better service to traffic accident victims than will a few isolated immobile first-aid stations. Motion of Drs. Shaw-Hartwell that the Preventive Medicine Committee endorse the principle of widespread instruction in first-aid work and that we commend the American Red Cross and other organizations for their efforts along this line, and that we recommend that the county medical societies improve existing facilities, that is, training of police officers and ambulance drivers and the public in the first-aid treatment of the injured in traffic and other accidents. Carried.
6. *Report of Michigan Tuberculosis Society.*—Dr. Geib read report from Dr. Bruce Douglas of the Michigan Tuberculosis Society on its work in Tuscola County. General discussion ensued. Motion of Drs. Harkness-Shaw that the report as read be accepted. Carried unanimously.

7. *Bureau of Tuberculosis in State Health Department.*—There was considerable discussion by all present relative to the question of a Bureau of Tuberculosis in the State Department of Health. It was brought out that work of such a Bureau would save the state much money. The State Department of Health could administer such a Bureau much more cheaply because of its numerous agencies and facilities throughout the state to carry on such work. It was suggested that someone who is already connected with the Communicable Disease Section be put in charge of a Tuberculosis Bureau, and thus not entail the expenditure of a large sum of money.
8. *Adjournment.*—The Chair thanked all for their presence and helpful advice and adjourned the meeting at 7:15 p. m. to meet with the Public Relations Committee in a joint session for a further discussion of the tuberculosis program of the State Department of Health.

MINUTES OF MEETING OF PUBLIC RELATIONS COMMITTEE

June 10, 1936

1. *Roll Call.*—The meeting was called to order by the Chairman, Dr. L. Fernald Foster, in the Statler Hotel, Detroit, at 5:00 p. m. Those present were: Dr. Foster, Bay City; Dr. F. B. Miner, Flint; Dr. Roy H. Holmes, Muskegon; Dr. A. V. Wenger, Grand Rapids; Dr. Philip A. Riley, Jackson; and F. T. Andrews, Kalamazoo. Also present were Dr. Henry Cook, Flint; Dr. T. F. Heavenrich, Port Huron; and Executive Secretary Wm. J. Burns. Absent: Dr. E. I. Carr, Lansing; Dr. J. J. Walch, Escanaba; and Dr. A. H. Whittaker, Detroit.
2. *Minutes.*—The minutes of the meeting of May 7, 1936, were approved as printed.
3. *Letter to Councilors.*—Report was given that Dr. Henry Cook, Chairman of The Council, had written each Councilor requesting information on regular and annual meetings of all county medical societies, as well as suggesting that the Councilor aid each county medical society in the study of its own economic problems.
4. *Afflicted-Crippled Child Problem.*
 - (a) The Governor's Executive Order of June 4, 1936, making the filter system official and also ordering use of affidavit by the Economic Filter, was read. Motion of Drs. Riley-Wenger that a copy of the Governor's Executive Order with all other information (Schedules A, B, C, and D) shall go to every member of the Michigan State Medical Society as soon as possible. Carried unanimously.
 - (b) Uniform Blank for Medical Filter Board. The necessity for this was discussed, and a motion was made by Drs. Riley-Holmes that the Executive Office of the M.S.M.S. gather all available blanks now in use from county filter boards, and that they be reviewed and that the recommended uniform blank be presented to the PRC at its next meeting. Carried unanimously.
 - (c) Integration Work. Letters from Dr. G. L. McClellan of Detroit, Dr. Stanley H. Vegers of Sault Ste. Marie, Judge Ruth Thompson of Muskegon, and Dr. L. E. Showalter of Cadillac, were read. Various difficulties with the filter system will be

corrected as a result of the Governor's Executive Order, it was felt by the Committee.

5. *Afflicted Adult Problem.*—A letter from Dr. H. F. Mattson, Hillsdale, was read. The PRC felt this is a local or county medical society problem, and that Dr. Mattson could solve the problem by utilizing this medium. The system used by Jackson County covering such cases was recommended.

6. *Bureau of Information.*—Report of the Subcommittee was given, and Drs. Andrews-Holmes made a motion that the Bureau of Information of the Michigan State Medical Society be put into operation immediately. Carried unanimously. The PRC felt that the time was ripe to present the medical viewpoint on matters in which the profession is interested.

It was recommended that in PRC Letter No. 4, all service clubs should be invited to hear a member (as a representative) of the Michigan State Medical Society at one or two meetings each year.

7. *Better Physician-Public Contact.*—Dr. A. H. Whittaker was not present, and on motion of Drs. Holmes-Andrews, this subject was laid on the table until the next meeting.

8. *Medical Supplement in Newspapers.*—The Executive Secretary reported on this activity started in Wichita, Kansas. Motion of Drs. Andrews-Riley that copies of the supplement be mailed to each member of the PRC, and that the matter be discussed at the next meeting.

9. *Secretaries Conference, September 23, 1936.*—Dr. Foster, as Chairman of the Secretaries, presented a tentative program of the Secretaries Conference, and asked for advice and recommendation. Dr. Riley recommended a talk on "How to Stimulate County Society Activity." Other suggestions were given Dr. Foster.

10. *Distribution of Medical Care.*—This was discussed by the Committee, and a motion was made by Drs. Holmes-Wenger that the PRC hold a special meeting devoted to a discussion of this subject. Carried unanimously.

11. *Adjournment.*—The Chair adjourned the meeting, and invited all present to attend the joint meeting with the Preventive Medicine Committee to be held immediately following this session, in the Judge Woodward room, Statler Hotel, Detroit.

MINUTES OF JOINT MEETING OF PUBLIC RELATIONS COMMITTEE AND PREVENTIVE MEDICINE COMMITTEE

June 10, 1936

1. *Roll Call.*—The meeting was called to order by Dr. L. Fernald Foster, Chairman of the Public Relations Committee, at 7:45 p. m. in the Judge Woodward Room, Statler Hotel, Detroit. Public Relations Committee members present were Dr. Foster, Bay City; Dr. F. T. Andrews, Kalamazoo; Dr. R. H. Holmes, Muskegon; Dr. F. B. Miner, Flint; Dr. Philip A. Riley, Jackson; and Dr. A. V. Wenger, Grand Rapids. Members of the Preventive Medicine Committee present were Dr. L. O. Geib, Chairman, Detroit; Dr. A. L. Callery, Port Huron; Dr. R. B.

Harkness, Hastings; Dr. Shattuck W. Hartwell, Muskegon; Dr. R. M. McKean, Detroit; Dr. J. J. O'Meara, Jackson; Dr. Milton Shaw, Lansing. Also present were Dr. Henry Cook, Chairman of The Council, Flint; Dr. T. F. Heaverich, Vice-Chairman of The Council, Port Huron; Secretary C. T. Ekelund, Pontiac; Dr. C. C. Slemmons, State Health Commissioner; Dr. E. J. O'Brien, State Sanatorium Commission; Dr. L. J. Hirschman, member of Council of State Department of Health, Detroit; Mr. T. J. Werle, Executive Secretary of the Michigan Tuberculosis Association; Mr. Clare Gates, Field Secretary of the Joint Committee on Public Health Education; and Executive Secretary Wm. J. Burns. Absent Public Relations Committee members: Dr. E. I. Carr, Lansing; Dr. J. J. Walch, Escanaba; and Dr. A. H. Whittaker, Detroit. Preventive Medicine Committee: Dr. Alfred La Bine, Houghton.

2. Dr. Foster gave the background of meetings and discussions leading up to recommendation that the State Department of Health create a Tuberculosis Division. A history of the Preventive Medicine Committee's interest in this important matter was given by its Chairman, Dr. Geib.

Dr. C. C. Slemmons, State Health Commissioner, stated that the State Department of Health does not intend to start a Tuberculosis Bureau. Not enough money is available to properly administer the Department now, without starting a Tuberculosis Bureau, according to Dr. Slemmons. Dr. L. J. Hirschman and Dr. Robert B. Harkness, members of the Council of the State Department of Health, reiterated Dr. Slemmons' statement that the State Department is not contemplating a Tuberculosis Bureau.

Dr. Foster called upon Dr. E. J. O'Brien of the State Sanatorium Commission; upon Mr. T. J. Werle, Executive Secretary of the Michigan Tuberculosis Association; upon the M. S. M. S. Secretary, Dr. C. T. Ekelund; and upon Chairman of The Council, Dr. Henry Cook.

3. The necessity for a Tuberculosis Division was stressed and thoroughly discussed by all present. Motion of Drs. Holmes-Miner that the Committee approve in principle the projected incorporation in the State Department of Health of a tuberculosis control service and that the Michigan State Medical Society offer its services with the Legislature to secure the appropriation of funds to that end, the service to be conducted with the cooperation of the Michigan State Medical Society and acceptable allied agencies. Carried unanimously.

Motion of Drs. Andrews-Holmes that this group consist of the Michigan State Department of Health, the Michigan Tuberculosis Association, the State Sanatorium Commission, the Preventive Medicine Committee and the Public Relations Committee of the Michigan State Medical Society; and that a committee of three be appointed which shall speak for these allied agencies in contacting governmental departments and the Legislature, to present facts, statistics, and information on the necessity for a tuberculosis division, and to request that adequate funds be provided to carry on this necessary work. Carried unanimously.

4. Dr. Foster thanked all for their attendance and good advice and adjourned the meeting at 9:10 p. m.

**HOUSE OF DELEGATES, MICHIGAN
STATE MEDICAL SOCIETY, 1936**

Alpena-Alcona-Presque Isle
F. J. O'Donnell, Alpena

Barry
R. B. Harkness, Hastings

Bay-Arenac-Isoco-Gladwin
L. Fernald Foster, Shearer Bldg., Bay City

Berrien
R. S. Snowden, Buchanan

Branch
R. L. Wade, Coldwater

Calhoun
Harvey Hansen, Battle Creek
A. T. Hafford, Albion

Cass
W. C. McCutcheon, Cassopolis

Chippewa-Mackinac
J. G. Blain, Sault Ste. Marie

Clinton
Dean W. Hart, St. Johns

Delta
J. J. Walch, Escanaba

Dickinson-Iron
E. M. Libby, Iron River

Eaton
A. G. Sheets, Eaton Rapids

Genesee
F. E. Reeder, Flint
George Curry, Flint
Donald R. Brasie, Flint

Gogebic
W. E. Tew, Bessemer

Grand Traverse-Leelanau-Benzie
E. F. Sladek, Traverse City

Gratiot-Isabella-Clare
Wm. E. Barstow, St. Louis

Hillsdale
O. G. McFarland, North Adams

Houghton-Baraga-Keweenaw
Geo. C. Stewart, Hancock

Huron-Sanilac
D. D. McNaughton, Argyle

Ingham
L. G. Christian, Lansing
Harold W. Wiley, Lansing
C. F. DeVries, Lansing

Ionia-Montcalm
F. H. Ferguson, Carson City

Jackson
Philip A. Riley, Jackson
James J. O'Meara, Jackson

Kalamazoo-VanBuren-Allegan
F. T. Andrews, Kalamazoo
R. G. Cook, Kalamazoo
Chas. TenHouten, Paw Paw

Kent
B. R. Corbus, Grand Rapids
Leon Sevey, Grand Rapids
Wm. R. Torgerson, Grand Rapids
A. V. Wenger, Grand Rapids
Carl F. Snapp, Grand Rapids

Lapeer
D. J. O'Brien, Lapeer

Lenawee
A. W. Chase, Adrian

Livingston
H. G. Huntington, Howell

Luce
R. E. Spinks, Newberry

Macomb
A. B. Bower, Armada

Manistee
K. M. Bryan, 111 Maple St., Manistee

Marquette-Alger
V. Vandeventer, Ishpeming

Mason
Lars W. Switzer, Ludington

Mecosta-Osceola
Geo. W. Yeo, Big Rapids

Menominee
Edward Sawbridge, Stephenson

Midland
David Littlejohn, Midland

Monroe
Dean Denman, Monroe

Muskegon
Roy H. Holmes, Muskegon

Newaygo
O. D. Stryker, Fremont

Northern Michigan
Guy C. Conkle, Boyne City

Oakland
Ernest Bauer, Hazel Park
Otto Beck, Birmingham

Oceana
W. Lemke, Shelby

O. M. C. O. R. O.
C. R. Keyport, Grayling

Ontonagon
E. J. Evans, Ontonagon

Ottawa
E. A. Stickley, Coopersville

Saginaw
Ralph Jiroch, Saginaw
C. E. Toshach, Saginaw

St. Clair
A. L. Callery, Port Huron

St. Joseph
R. A. Springer, Centerville

Schoolcraft
Gail Broberg, Manistique

Shiawassee
I. W. Greene, Owosso

Tuscola
O. G. Johnson, Mayville

Washtenaw
John Sundwall, Ann Arbor
John Wessinger, Ann Arbor
Dean W. Myers, Ann Arbor

Wexford
W. Joe Smith, Cadillac

Wayne (All delegates from Detroit except otherwise indicated)

R. C. Jamieson, T. K. Gruber of Eloise, J. M. Robb, Ralph H. Pino, L. J. Hirschman, Fred H. Cole, Jos. H. Andries, H. A. Luce, W. D. Barrett, Wm. J. Cassidy, Wm. J. Stapleton, F. B. Burke, Wm. R. Clinton, Douglas Donald, A. E. Catherwood, A. P. Biddle, S. W. Insley, Harry F. Dibble, Angus MacLean, Chas. R. Kennedy, John L. Chester, E. D. Spalding, C. F. Brunk, Frank A. Kelly, H. W. Plaggemeyer, H. W. Yates, Chas. E. Dutchess, David I. Sugar, A. W. Blain, P. L. Ledwidge.

LOCAL COMMITTEES ON ARRANGEMENTS, SEVENTY-FIRST ANNUAL MEETING, MICHIGAN STATE MEDICAL SOCIETY, DETROIT, SEPTEMBER 21-24, 1936

General Chairman: Dr. T. K. Gruber,
President of the W. C. M. S.

Committee on Hotels

- | | |
|---------------------------------|-----------------|
| 1. Harry F. Dibble,
Chairman | 4. F. T. Munson |
| 2. Volney Butler | 5. A. H. Price |
| 3. W. C. Lawrence | 6. C. K. Valade |
| | 7. R. V. Walker |

Entertainment Committee

- | | |
|--------------------------------|-----------------------|
| 1. M. H. Hoffmann,
Chairman | 4. J. W. Becker |
| 2. H. G. Bevington | 5. E. W. Fitzgerald |
| 3. B. L. Connelly | 6. Frank M. MacKenzie |

Committee on Reception and Information

- | | |
|-----------------------------|----------------------|
| 1. C. E. Lemmon
Chairman | 7. J. D. Mabley |
| 2. J. R. Boland | 8. W. D. Mayer |
| 3. R. H. Bookmyer | 9. Kenneth McCall |
| 4. Douglas Donald | 10. C. S. Ratigan |
| 5. Howard Hanna | 11. O. W. Pickard |
| 6. S. W. Insley | 12. Lynn F. Webber |
| | 13. Wm. P. Woodworth |

Committee on Guests and Speakers

- | | |
|-------------------------------|------------------|
| 1. W. B. Cooksey,
Chairman | 4. C. K. Hasley |
| 2. J. H. Andries | 5. H. A. Luce |
| 3. Wm. J. Cassidy | 6. Wm. S. Reveno |
| | 7. D. I. Sugar |

Clinic Monitors Committee

- | | |
|------------------------------|---------------------|
| 1. E. R. Witwer,
Chairman | 8. M. W. Jocz |
| 2. F. B. Burke | 9. Paul Lippold |
| 3. Don A. Cohoe | 10. R. C. Lockwood |
| 4. C. A. Christensen | 11. J. B. Rieger |
| 5. Paul DuBois | 12. Saul Rosenzweig |
| 6. R. L. Fisher | 13. L. W. Shaffer |
| 7. Thos. N. Horan | 14. Nelson Taylor |
| | 15. C. E. Umphrey |

Committee on Autos and Parking

- | | |
|-------------------------------|---------------------|
| 1. L. J. Gariepy,
Chairman | 4. E. P. Mills |
| 2. L. M. Bush | 5. R. R. Piper |
| 3. B. L. Connelly | 6. Gerald A. Wilson |

Golf Committee

- | | |
|------------------------------|------------------|
| 1. C. D. Brooks,
Chairman | 4. L. J. Morand |
| 2. Donald V. Clark | 5. L. S. Potter |
| 3. R. C. Leacock | 6. Walter Wilson |

Finance Committee

- | | |
|-------------------------------|----------------------|
| 1. A. R. Hackett,
Chairman | 2. W. H. Gordon |
| | 3. Herman D. Scarney |

Committee on Publicity

- | | |
|--------------------------------------|---------------------|
| 1. Wm. J. Stapleton, Jr.
Chairman | 4. A. E. Gehrke |
| 2. S. E. Barnett | 5. R. W. Hughes |
| 3. J. H. Dempster | 6. C. S. Kennedy |
| | 7. George C. Leckie |

Committee on Exhibits

- | | |
|-----------------------------|---------------------|
| 1. S. E. Gould,
Chairman | 3. Stanley H. Brown |
| 2. A. O. Brown | 4. H. G. Palmer |

WOMAN'S AUXILIARY

- | | |
|--|---------------------------------------|
| 1. Mrs. Roger V. Walker,
Gen'l Chairman | 4. Mrs. F. W. Hartman,
Publicity |
| 2. Mrs. H. W. Plaggmeyer,
Entertainment | 5. Mrs. M. D. Vokes,
Hobby |
| 3. Mrs. A. O. Brown,
Transportation | 6. Mrs. H. A. Freund,
Registration |

COUNTY SOCIETIES

**CALHOUN COUNTY HOLDS
"STATE SOCIETY NIGHT"**

Members of the Calhoun County Medical Society were hosts to officers and committee members of the Michigan State Medical Society at the Post Tavern in Battle Creek on Tuesday, June 2, 1936. The meeting got off to an excellent start with refreshments and dinner, followed by serious and quasi-serious speeches by the distinguished guests.

Dr. Grover C. Penberthy, Detroit, President of the State Society, outlined the "Five Year Program of the M.S.M.S." Dr. Henry Cook, Flint, Chairman of The Council, outlined the "Advantages of Unity." Dr. C. T. Ekelund, Pontiac, Secretary, spoke on "Who Wants Socialized Medicine!" Dr. James H. Dempster, Detroit, Editor of THE JOURNAL, gave a talk on How Not to Write the Case History." Dr. H. H. Cummings, Ann Arbor, Chairman of the Legislative Committee, outlined the program of his hard-working group and called upon all physicians to lend active aid; Dr. Ralph H. Pino, Detroit, Chairman of the Economics Committee, spoke of several important surveys which his Committee is now conducting. Brief talks were given by Dr. W. E. Barstow, St. Louis, Councilor of the Eighth District, Dr. P. R. Urnston, Bay City, Councilor of the Tenth District, and by Wm. J. Burns, Executive Secretary. Dr. L. Fernald Foster, Bay City, explained the "Integration Program of the Michigan State Medical Society."

The meeting was presided over by Dr. R. C. Winslow, President of the Calhoun County Medical Society. Dr. Wilfrid Haughey of Battle Creek was Secretary.

Among others present at this important get-together were Drs. H. A. Miller of Lansing, R. J. Armstrong of Kalamazoo, R. C. Hildreth of Ann Arbor, R. W. Shook of Kalamazoo, R. L. Wade of Coldwater, S. Schultz of Coldwater, F. T. Andrews of Kalamazoo, Philip Riley of Jackson, L. G. Christian of Lansing, W. N. Kenzie, A. G. Sheets of Eaton Rapids, John Fopeano of Ann Arbor.

Drs. A. T. Hafford, J. B. Keeler, L. N. McNair, A. D. Sharp, R. H. Baribeau, H. F. Becker, G. M. Byington, R. J. Campbell, M. J. Capron, W. R. Chynoweth, William Dugan, C. G. Fahndrich, Robert Fraser, A. M. Giddings, C. S. Gorsline, E. E. Hancock, Harvey Hansen, Wilfrid Haughey, J. J. Holes, B. G. Holtom, W. L. Howard, Arthur Humphrey, E. L. Lanman, D. M. LeDuc, H. M. Lowe, S. T. Lowe, K. Lowe, A. E. MacGregor, A. W. Nelson, J. E. Rosenfeld, W. A. Royer, B. Selmon, L. P. Shipp, R. S. Simpson, R. D. Sleight, R. H. Steinbach, R. Stiefel, W. O. Upson, E. Van Camp, F. R. Walters, R. C. Winslow, Karl Zinn, S. E. Barnhart, N. O. Byland, E. L. Eggleston, W. B. Lewis, M. O. Mortensen, A. B. Olsen, B. M. Overholt, W. H. Riley, Paul Roth, G. W. Slagle, N. Abbott, H. Buker, C. E. Hale, E. K. Jones, M. R. Kinde, T. C. Smith, R. K. Curry, W. H. Royer, F. Walters, Keeler, C. E. Hale, all of Calhoun County.

EATON COUNTY

The May meeting of the Eaton County Medical Society was held at Charlotte, May 28, 1936. After the dinner, Dr. John T. Hodgen, Grand Rapids orthopedic surgeon, was introduced and the meeting was turned over to him. Temporarily shelving his address on Osteomyelitis, Dr. Hodgen discussed briefly the malpractice scourge of today and how

the doctor should conduct his practice, and particularly his fracture cases, so as to protect himself from even the remote possibility of one day hearing his once devoted patient tearfully entreat twelve men tried and true to deal out justice to that "so-and-so" of a doctor. Dr. Hodgen suggested that Fracture Committees to supervise and to act as consultants in fracture cases, and particularly serious ones, might do a great deal towards furnishing protection to the men responsible for the individual case. This reporter feels that such a scheme would not operate very happily in small towns where each man feels that he knows just as much about fractures as his colleague, but should operate nicely in larger centers where the orthopedic specialist is recognized and accorded his due.

Dr. Hodgen then proceeded to his talk on the subject of "Osteomyelitis." He first reviewed very clearly, with the aid of slides, the internal architecture and histologic construction of bone. "Without a clear understanding of the Haversian system and its intercommunicating lacunae and canaliculi, the distribution of the nutrient arteries, the pattern of the periosteum and the influence of the epiphyseal cartilaginous plate, it is not possible," said Dr. Hodgen, "to understand osteomyelitis, its inception, dissemination and indicated treatment." Many x-ray slides were shown depicting various types and stages of bone infection, including the localized type of osteomyelitis commonly known as Brodie's abscess. As treatment, Dr. Hodgen discussed the active surgical intervention using the gutter or saucerizing operation with vaseline gauze, packing after the technic of Orr, treatment by means of bacteriophage, maggots and allantoin, which last is a commercial preparation of the active principle of maggots. The importance of pre-operative care with hydration and blood transfusion was strongly emphasized by Dr. Hodgen.

A business meeting followed the discussion of Dr. Hodgen's paper. On the motion of Dr. Engle a resolution was introduced and unanimously accepted to the effect that this society was strongly in favor of the use of sufficient consultants in fracture cases to provide adequate protection to the responsible doctor and his patient. Dr. D. V. Hargrave proposed that this society adopt a resolution to the effect that it believes sufficient indications to exist to justify the establishment of a post-graduate center in the second councillor district. This was unanimously accepted by the society and a copy was dispatched to Dr. McIntyre, councillor of this district.

This society is proud to announce that the *Eaton County Medical Society Bulletin* was founded at this meeting. The members of this society have been favored with unusually good clinical programs and the bulletins will contain papers delivered at the meetings in addition to other topics of interest. This society wishes to go on record as believing that the old adage concerning quality and quantity still obtains and that a small society can be as progressive and wide-awake as the larger ones.

THOMAS WILENSKY, M.D.,
Secretary

GENESEE COUNTY

The meeting of the Genesee County Medical Society was held at Hurley Hospital, Wednesday, May 13, 1936.

Meeting was called to order by the President, Dr. R. D. Scott. Minutes of the last meeting were read and approved.

Dr. Probert gave his report for the Preventive Medicine Committee and briefly outlined the plan

for unification of Public Health Agencies as recommended by Dr. Buck. It was moved by Mr. Morrish that the Society endorse this proposed plan. Seconded and passed.

Dr. Malfroid, as chairman of the committee for investigation of the proposed tumor clinic, recommended that this plan be tabled indefinitely. Seconded and passed.

The Chair then appointed a new Economics Committee composed of Dr. Morrish, Chairman, and Drs. T. S. Conover, Halligan, Shantz, Bogart, Gundry, Pfeiffer, Miner and Brasie.

Dr. T. G. Yeomans was accepted as a member on a transfer from the Berrien County Medical Society.

A communication was read from the Preventive Medicine Committee asking for authorization of the expenditure of \$25.00 for purchasing of trailers advocating immunization for diphtheria and smallpox. Dr. Randall moved that this be authorized. Seconded and passed.

A very interesting talk was given by Dr. C. B. Brooks on "Surgery of the Biliary Tract."

C. W. COLWELL, M.D., *Secretary*.

IONIA-MONTCALM COUNTIES

The June meeting of the Society was held in Palo, on Tuesday, June 9, with dinner at 7:00 P. M. served by the ladies of the Baptist Church, in the church dining room.

This meeting was a tribute to Dr. F. A. Hargrave who has practiced continuously in Palo for over fifty years.

Doctor Hargrave has for many years been keenly interested in the subject of cancer, and the Committee arranged a program which honored him, as well as gave consideration to his favorite subject.

Dr. F. H. Ferguson presided.

Dr. A. P. Culbertson of Vickeryville gave "Reminiscences."

Dr. F. E. Luton of St. Johns gave an informal talk.

Dr. Richard R. Smith of Grand Rapids discussed "Cancer."

After the talks, Doctor Hargrave was made a life member of the Society.

JOHN J. McCANN, M.D., *Secretary*.

OTTAWA COUNTY

Pursuant to a motion adopted by the meeting of the Ottawa County Medical Association on March 10, 1936, that the Association recognize the death of Dr. W. G. Winter, the Secretary presents the following resolution:

WHEREAS, the Ottawa County Medical Association recognizes that in the passing of Dr. W. G. Winter, the community in which he faithfully and successfully carried on his chosen profession, as well as the County Association and the medical profession at large, have lost a highly esteemed and valuable member and worker, and that we, his colleagues, also recognize that his wife and family have suffered a most serious and sad loss,

WE, THEREFORE, the better to retain his memory, resolve to file in our minutes an expression of our appreciation of his recognized merits and standing in the profession and extend to Mrs. Winter and the family the deep and heartfelt sympathy of the County Medical Association.

WASHTENAW COUNTY

A regular meeting of the Washtenaw County Medical Society was held in the Michigan Union at 6 p. m., May 12, 1936. Fifty members attended the dinner and business session. President Miller presided. The minutes of the meeting of April 14 were approved as printed on the programs.

President Miller appointed the following members to serve as a Committee on Maternal Welfare: Sidney LaFever, Walter Belser, R. D. Reekie.

The reports of the Committees on Resolutions concerning the late Dr. Albert M. Barrett and the late Dr. Henry W. Schmidt were read and unanimously adopted. Copies of these resolutions will be found in the book of minutes.

Dr. John S. DeTar, Chairman of the Committee on Public Relations, reported that the Medical Filter Board is meeting regularly each Wednesday morning, and that the work done seemed to be satisfactory to all parties concerned.

Following the business session the group adjourned to rooms 319-21-23 across the hall where a group of addresses concerning automobile accidents was given to an audience of about one hundred persons, about half of whom were lay people and medical students. The following program was presented:

"Our Traffic Problem," by Lieutenant Herbert McCaske of the Detroit Police Department.

"The Pathology of Automobile Accidents," by Dr. Carl V. Weller of the University of Michigan School.

"The First Aid Treatment of Injuries to the Head and Back," by Dr. Max Minor Peet of the University of Michigan Medical School.

"The management of Injuries to the Body and Extremities," by Dr. Charles Washburne of the staff of St. Joseph's Mercy Hospital.

The meeting adjourned at 8:30 P. M.

JOHN V. FOPEANO, M.D., *Secretary*.

Orchitis and Oöphoritis Parotidea (Osler)

A. P. Ohlmacher, Royal Oak, Mich. (*Journal A.M.A.*, June 13, 1936), cites an instance of orchitis parotidea without parotitis along with a case of primary oöphoritis due to the virus of mumps. Rather definite similarities existed in the appearance of the involved ovary in the second case and that of the testicles exposed at operation by other workers. There would seem to be little doubt concerning the authenticity of this case of oöphoritis parotidea. No other logical explanation for the appearance of the ovary, especially in the light of subsequent developments, can be readily advanced. A specimen for microscopic study was not obtained. The whole subsequent clinical picture, including the general physical condition of the patient, the chronological sequence of events leading to the development and subsidence of the parotid involvement and the physical characteristics of the salivary protuberances was definitely not that of the suppurative postoperative type of parotitis. The author is convinced that the exposure and manipulation of the offending ovary were important factors in the prompt development and full blown picture assumed by the parotitis. Whether without operation the parotids would have remained unswollen and the case run its course as one of oöphoritis parotidea without parotitis is idle speculation. It is probable that this excessively unusual pathologic process will always present enough similarity to acute appendicitis to suggest operative intervention strongly, even granting that watchful waiting and astute differential diagnostic efforts would surely be rewarded by cognizance of the true state of affairs.

July, 1936

WOMAN'S AUXILIARY

Mrs. A. M. GIDDINGS, President, 22 Riverview Ave., Battle Creek

Mrs. KENNETH LOWE, Secretary-Treasurer, 107 Elizabeth St., Battle Creek

Mrs. L. C. HARVIE, Press Chairman, 341 Brockway Place, Saginaw

NOTES ON THE NATIONAL CONVENTION

More than one thousand women were registered—this a pre-depression figure. All the meetings were largely attended and the program of business and social activities was carried on with great success.

Besides the president, those attending from Michigan were Mrs. C. L. Straith, Mrs. J. H. Dempster, Mrs. Frank Hartman, Mrs. Burt Shurly, Mrs. E. L. Whitney of Detroit; Mrs. Nils O. Byland and Mrs. J. E. Cooper of Battle Creek. Mrs. E. L. Whitney was third vice president of the national organization.

The new president, Mrs. Robert E. Fitzgerald, of Wauwatosa, Wisconsin, is a native of Michigan, having spent her girlhood in the northern peninsula on the shores of Lake Superior. She was educated at Wellesley and the University of Michigan. Mrs. Fitzgerald is to be the honored guest at our State convention in September.

Michigan put herself on the map with her *Hygeia* report—the number of subscriptions being nearly three times that of Wisconsin, the "runner-up." Our goal, or quota, was 598 subscriptions; our achievement was 1,862 8/12.

Our contribution to the interesting Exhibit Booth was an attractive *Hygeia* poster, prepared by our *Hygeia* Chairman, Mrs. Carl Snapp; a large "membership" map; a sample maternity kit from Calhoun County; the State scrap book; and the Wayne County scrap-book. Mrs. L. C. Harvie served as state chairman of exhibits.

Reports from thirty states were given either by State Presidents or delegates. High points of state activities will be incorporated in your president's official report of the convention.

New York state was the "baby" of the convention. North Dakota and Montana are now being organized.

Mrs. Samuel Clark Red of Houston, Texas, the first national president, was an interested and an interesting figure at all the meetings. Mrs. Herbert L. Mantz of Kansas City, Mo., the general chairman on local arrangements, proved herself a gracious and efficient hostess. Much of the success of the convention is due to her capable direction, and the coöperation of her assistants. The delightful weather during the convention was also a big factor in the enjoyment of the week's activities.

Kansas City is truly a fine convention city. Many points of interest were visited during the complimentary late afternoon drives through the parks and around the city. Local members extended hospitality of beautiful homes for tea, supplementing these drives.

A high spot in the entertainment afforded was a complimentary "Gallery Walk" through the William Rockhill Nelson Gallery of Art.

(Mrs. A. M.) LEAH M. GIDDINGS, *President*.

COUNTY NEWS

Calhoun County.—The Marywood Country Club was the scene of a lovely formal dinner Tuesday evening, May 26, given for the pleasure of the nurses being graduated from Leila and Nichols hospitals by the Auxiliary to the Calhoun County Medical Society. It followed an annual custom.

Blue and white were carried out in the table decorations, this color motif being relieved by floral centerpieces of pink roses and white carnations. Places were marked for seventy-five and each honoree found for a favor a diary.

Mrs. Wm. Dugan, president of the hostess unit, extended greetings to the guests and a response was given by Miss Alta Shumway, for Leila, her alma mater, and by Miss LaVerne Geer, for Nichols, where she received her training. There followed a varied program of entertainment.

Mrs. Stanley Lowe was heard in two readings and a half hour of entertainment was presented by Charles Crain and several of his dancing pupils. At the conclusion of this feature LeRoy Sparks, physical director at the Sanitarium, led the group in a grand march which merged into an old-fashioned square dance.

Mrs. Manley J. Capron served as general chairman for the event, she being assisted by Mrs. Stanley Lowe, Mrs. W. R. Chynoweth and Mrs. W. Leonard Howard.

LOIS M. UPSON, *Press Chairman.*

* * *

Eaton County.—The Auxiliary to the Eaton County Medical Society met Thursday evening, May 28, at the Osborn Cafe, in Charlotte, for a 6:30 dinner, with fourteen members present.

The business meeting, which followed, was held at the home of Mrs. C. D. Huber. Each member responded to roll call by paying fifty cents and telling how she earned it. Later, we held a white elephant sale, which was not only entertaining but profitable, adding ten cents more per person to our treasury.

Election of officers was held with the following officers being unanimously elected: President, Mrs. Thos. Wilensky, Eaton Rapids; vice president, Mrs. Lester Sevensen, Charlotte; secretary, Mrs. J. W. Davis, Charlotte; treasurer, Mrs. Paul Engle, Olivet.

Mrs. Wilensky read an interesting book report on James Hilton's "The Lost Horizon."

MRS. D. V. HARGRAVE, *Press Chairman.*

* * *

Kalamazoo County.—The annual meeting of the Kalamazoo Auxiliary was held Tuesday evening, May 19, at the home of Mrs. Benjamin Nibbelink, Long Road. Covers were laid for twenty-seven members at a coöperative supper preceding the business meeting.

The following officers were elected: President, Mrs. Clarke B. Fulkerson; president-elect, Mrs. Walter W. Lang; first vice president, Mrs. Leo J. Crum; second vice president, Mrs. W. D. Irwin; secretary, Mrs. R. B. Fast; treasurer, Mrs. J. G. Malone.

Delegate to the State Convention in Detroit will be Mrs. Fulkerson, with Mrs. Lang as alternate.

The annual reports were read and work for the coming year was discussed. The group voted to accept the invitation of Mrs. A. S. Youngs, 1290 Crescent Beach, Gull Lake, for a picnic and swimming party at 12 o'clock Friday, June 5. The later evening was spent socially.

(MRS. F. M.) WILMA G. DOYLE,
Press Chairman.

MICHIGAN'S DEPARTMENT OF HEALTH

C. C. SLEMONS, M.D., Dr.P.H., Commissioner
LANSING, MICHIGAN

Expansion of maternal and child health services in Michigan under the Social Security Act allotments has made possible the establishing of county-wide nursing service in Gratiot, Tuscola, Muskegon, Montcalm, and Clinton counties during the month of May under the sponsorship of the State Department of Health.

Arrangements are now being made for the organization of nursing service in six other counties which have no generalized public health service. These counties include St. Joseph, Cass, Livingston, Lenawee, Kalamazoo, and Ionia.

The nursing program, to be carried out in these counties, has been discussed in detail by the Executive Committee of the Michigan State Medical Society in collaboration with the Bureau of Child Hygiene and Public Health Nursing, Michigan Department of Health. The county nurses will work in coöperation with the county medical societies. Members of each society will have an opportunity to discuss the program in detail. Special advisory committees appointed by the county medical societies will be in direct contact with the operation of the program.

A brief outline of the program to be offered by the Michigan Department of Health for the development of maternal and child health services under the Social Security Act includes the following:

1. Nurses will be trained in public health at the University of Michigan in a four-months course including both theoretical and field training.

2. Public health nurses will be located in counties having no generalized public health nursing program to carry on a maternal and child health program. Special emphasis will be placed on services to prospective mothers and children under school age, although some health education will be given in the schools, including occasional child health classes.

3. The present prenatal nursing program will be expanded through an increase in staff nurses experienced in prenatal nursing. This is an educational service entirely and includes visits to prospective mothers referred by the family physician. It will include no bedside nursing, with the exception of an occasional demonstration to some adult member of the family of the nursing care of a mother following childbirth, if the physician so requests.

4. Child care classes will be conducted in rural areas and small town schools—a series of twelve talks on the care of infants and growing children arranged through the school system, usually in connection with the home economics department of the school.

5. Women's classes will be organized for a series of eight weekly lectures by women staff physicians upon subjects related to the care of prospective mothers, infants, and young children.

6. The infant welfare program includes the delivery of birth certificates to parents of newborn

JOUR. M.S.M.S.

babies by the nurses. At these calls the mothers are urged to take the child during its first year to the family physician for immunization against diphtheria and vaccination against smallpox.

7. One of a series of nine prenatal letters and one postnatal letter will be mailed each month to prospective mothers at the request of physicians, of the mothers themselves, or of friends. In each letter the importance of regular medical supervision is advised and the mothers are asked if they have already consulted their family physician.

8. The amount of educational literature available to residents of Michigan on prenatal, infant, and child care will be expanded to meet the increased demands for such literature.

Dr. Ruth E. Stocking began a new series of women's classes in Marquette County, May 25, which will continue for eight weeks.

Dr. Pearl A. Toivonen is teaching an eight weeks series of women's classes in Antrim County which began April 27.

The field nurses who have been teaching child care classes in the schools have finished their classes for this semester and will start Infant Welfare Programs in various counties in the state soon.

Miss Bertha Groth is conducting a prenatal program in Berrien County and Miss Nell Lemmer is conducting a similar program in Lapeer County.

OBITUARY

Dr. Alden Humphrey Williams

Dr. Alden H. Williams of Grand Rapids died of heart disease on June 10 after a brief illness. Dr. Williams was one of the best known physicians in the state; in fact, to members of his own specialty, he had a national acquaintance. He was born in Pennsylvania in 1877. After attending the state normal school in Pennsylvania, he entered the University of Michigan, where he graduated M.D. in 1899. He pursued postgraduate work in Berlin in 1907. He was chief-of-staff of the Butterworth Hospital in 1922. He was also a member of the Kent County, Michigan State, and American Medical Associations.

Dr. Williams limited his practice to x-ray diagnosis and treatment and radium therapy. He was president of the Radiology Society of North America in 1920. He was a member of American Roentgen Ray Society, the American Radium Society and the London, England, Roentgen Society. He was, also, a fellow of the American College of Physicians. Dr. Williams was City Bacteriologist of Grand Rapids from 1905-10 and he was Kent County Physician, 1906-16. He had written various articles on anesthesia, clinical laboratory and later on subjects in his specialty, namely, radiology. He had practiced in Grand Rapids since his graduation. At the time of his death, he was attending roentgenologist for the Butterworth Hospital and also on the advisory staff of Blodgett Hospital.

He is survived by his widow, Mrs. Nellie R. Williams (nee Roller, daughter of Dr. Louis Roller), by his mother, and by two daughters, Mrs. Helen Vesotsky and Miss Alice Williams, and two sons, Louis Alden and Richard Roller, and one sister—Miss Ethelberta Williams.

CORRESPONDENCE

Does Not Favor Dividing Practice Into Professional and Technical

To the Editor:

Not so long ago, we were prone to rate ourselves by the number of our assistants, many of whom were not physicians. It is the old story. Seeds of adversity are always sown during prosperity. We delegated much to others and now we find that they have not only kept but are adding to their fields of activity. Hospitals, nurses and technicians were quick to enter the fields we were too indolent to keep adequately covered. We have awakened and with what a headache! Hospitals are, with few exceptions, actually practicing medicine in the fields of anesthesia, pathology and roentgenology.

Pathological diagnosis in this country is in many instances notoriously unreliable, I am told, because the very poor remuneration paid pathologists by hospitals results in attracting, in many cases, only failure types for this specialty. This is also similarly true in roentgenology; the public is and will be the worse off the longer these conditions exist.

Corporate practice of medicine whether by hospitals, industry or others except physicians is illegal, and any attempt to divide medical practice into technical and professional branches is an effort on the part of hospitals and non-professional groups to appropriate for themselves a part of medical practice. This would lead to lower standards of medical service to the public. Anything requiring medical training or professional judgment either in diagnosis or treatment is embodied in the practice of medicine as legally understood and can legally be done only by a physician or by some one under his direct supervision.

C. S. GORSLINE.

Battle Creek
June 2, 1936

The Gordon Test for Hodgkin's Disease

David H. Rosenberg and Leon Bloch, Chicago (*Journal A. M. A.*, April 4, 1936), record their results with the Gordon test in three cases of Hodgkin's disease and in three other lymph nodes used as controls (metastatic adenocarcinoma; aleukemic lymphadenosis; lymphoid hyperplasia). The test was positive in two cases of early Hodgkin's disease and negative in a chronic case of one year's duration. The three abnormal lymph nodes, used as controls, gave negative tests. From the reports in the literature the test has been applied in seventy-seven cases of Hodgkin's disease and has been found positive in fifty-six instances (77.9 per cent). Of 101 controls, consisting of normal lymph nodes and nodes showing carcinoma, sarcoma, lymphosarcoma, "pseudoleukemia," leukemia, tuberculosis, lymphoid hyperplasia and adenitis, the test was negative in ninety-eight cases (97 per cent), the three positive tests having been reported recently by Manson, two of which were cases of tuberculous lymphadenitis and one was of lymphoid hyperplasia. Since about one-fourth of the reported cases of Hodgkin's disease gave negative tests, and since the positive tests were more frequently observed in early or acute cases, the value of Gordon's test, if ultimately proved, seems to be limited to the diagnosis of early or histologically atypical cases. Further trial by different investigators is essential, however, before it will be possible to pass final judgment on its usefulness or specificity.

GENERAL NEWS AND ANNOUNCEMENTS

The One Hundred Per Cent Club of the Michigan State Medical Society

composed of county medical societies which have paid dues in full for each and every member of the county and state medical societies, now totals twenty-three societies:

1. Alpena County Medical Society
2. Eaton County Medical Society
3. Gogebic County Medical Society
4. Grand Traverse-Leelanau-Benzie Medical Society
5. Hillsdale County Medical Society
6. Ingham County Medical Society
7. Lenawee County Medical Society
8. Luce County Medical Society
9. Manistee County Medical Society
10. Mecosta-Osceola County Medical Society
11. Midland County Medical Society
12. Muskegon County Medical Society
13. Newaygo County Medical Society
14. Northern Michigan Medical Society
15. Oceana County Medical Society
16. Ontonagon County Medical Society
17. Ottawa County Medical Society
18. Saginaw County Medical Society
19. Saint Clair County Medical Society
20. Schoolcraft County Medical Society
21. Shiawassee County Medical Society
22. Tuscola County Medical Society
23. O. M. C. O. R. O. Medical Society

Medical History of Michigan. Two volumes. Price reduced to \$5.00 for both volumes. Write the Executive Office, 2020 Olds Tower, Lansing.

The advertisers in this issue of *THE JOURNAL* are truly your friends: they make possible the publication of your *JOURNAL*. Please patronize them, and mention "THE JOURNAL."

Dr. S. L. La Fever of Ann Arbor has been elected secretary-treasurer of the Washtenaw County Medical Society to succeed Dr. John V. Fopeano, who has moved to Battle Creek.

Don Marshall, A.B., M.S., M.D., has been appointed full time assistant professor of Ophthalmology of the University of Michigan Medical School.

"We beg to advise that we are entirely sold out and have no sleeping rooms available at our hotel between September 21 to 24." This statement comes from one of the leading Detroit Hotels.

Get your hotel reservation now, before the sell-out.

Afflicted Child Commitments for the month of May, 1936, totaled 1,325, of which 262 were sent to the University Hospital. The Crippled Children Commission reports that many of these cases during May were pneumonias.

A splendid tribute to the memory of Dr. Carl Frederick Moll was published as the lead article in the *Bulletin of the Genesee County Medical Society*, May issue. The eulogy was written by Dr. R. S. Morrish, Flint.

Judge Frank L. McAvinchey, Probate Judge of Genesee County, gives a talk on finances to every couple whom he marries, and also presents them with a copy of "Household Allowance and Family Budget System."

Dr. A. W. Crane of Kalamazoo was honored at a recent commencement of the Kalamazoo College with the degree of Doctor of Science in recognition of his scholarship in high standing as well as high professional standing.

Additional copies of the booklet on "Who Wants Socialized or State Medicine?" may be procured by physicians for their friends, civic leaders and influential citizens. No charge. Send a postal card to 2020 Olds Tower, Lansing, Michigan.

Notice to county medical societies: July 20, 1936, is the deadline date for societies which desire to invite the Michigan State Medical Society to hold its 1937 meeting in their community. Send your communication to the Speaker of the House of Delegates, 2020 Olds Tower, Lansing.

The danger of divulging a confidential communication, without procuring permission slip from the patient, is stressed by the Economics Committee. (See item three of minutes of Medical Economics Committee meeting of May 27, 1936, published in this issue of *THE JOURNAL*.)

The 1936 Graduate Fortnight of the New York Academy of Medicine will be held October 19 to 31 and will be devoted to a consideration of "Trauma; occupational diseases and hazards." For further information and complete program write Dr. Frederick P. Reynolds, 2 East 103rd St., New York, New York.

Mrs. Myrtle Crummer Ingram has presented to the University of Michigan the Dr. Leroy Crummer Library of over one thousand volumes to which she has added ten incunabula. Seventy-five volumes have an important bearing on the history of medicine.

At the recent annual meeting of the Detroit Dermatological Society, the following members were elected to office for the ensuing year: President, Dr. W. G. Wander; president-elect, Dr. George H. Belote (Ann Arbor); secretary-treasurer, Dr. G. Warren Hyde; recorder, Dr. A. E. Schiller.

Alumni of all medical fraternities of Michigan will meet in Detroit on the occasion of the annual convention of the Michigan State Medical Society next September. The Fraternity Alumni secretaries are requested to send programs of their meetings to the Secretary of the State Society, 2020 Olds Tower, Lansing, for publication in *THE JOURNAL*.

Dr. J. Earl McIntyre, Lansing, Councilor of the Second District, addressed the Hillsdale County Medical Society at Hillsdale on Thursday, June 18, on the subject "The Activities of the Michigan State Medical Society." Dr. L. G. Christian of Lansing and Dr. Philip Riley of Jackson explained "The Filter System."

Dr. Frank E. Reeder, Speaker of the House of Delegates, wishes to thank the secretaries of county medical societies who supplied him with the names

of delegates and alternates to the 1936 House of Delegates. Due to these early reports, Speaker Reeder has been able to appoint all his committees and select the chairmen for the Detroit session, September 21 to 24, 1936.

* * *

Dr. Henry R. Carstens, Chairman of the Finance Committee of the Michigan State Medical Society, has been selected by the Board of Trustees of the Wayne County Medical Society, as treasurer of that organization, succeeding Dr. Frank A. Kelly who retired as treasurer after many years of service. Congratulations!

* * *

The chairmen of the Local committees on arrangements for the Detroit Meeting of the Michigan State Medical Society are busy working out details, to insure a smooth running show for the 2,000 physicians and their wives who are expected to register. The chairmen have already held two meetings, one on Saturday, May 23, and the second on Monday, June 22.

* * *

The Scientific Exhibit will comprise over fifty-five booths, and the Technical Exhibit will have seventy booths at the 71st Annual Meeting of the Michigan State Medical Society, Detroit, September 1936. This will be the largest exhibit in the history of the Society and will cover two floors. In addition, the Woman's Auxiliary will sponsor a hobby show. Be there!

* * *

A Subcommittee on Insurance Examinations has been appointed by the Medical Economics Committee. The personnel of this Subcommittee is: Dr. Roy H. Holmes, chairman, Muskegon; Dr. A. G. Armstrong, Detroit; Dr. Wm. E. Miller, Detroit; and Dr. V. L. VanDuzen, Detroit. It will report to the membership at the Annual Meeting in September.

* * *

Dr. Morris Fishbein, editor of the *Journal A.M.A.*, addressed the School Teachers' Association of Detroit, May 25. His subject was Food Fallacies and Fancies. Before the meeting an informal dinner in the speaker's honor was given in the Wayne County Medical Society's club room by a number of school principals and an equal number of members of the Medical Society.

* * *

Economics Committee of Ophthalmologists. The following Economics Committee representing the Ophthalmologists of Detroit has been appointed: Herman D. Scarney, Joseph T. O'Hara, S. E. Barrett, Frederick Munson, Wesley G. Reid, Leland F. Carter, Raymond S. Goux, Howell L. Begle, Chairman, and Arthur P. Wilkinson, Secretary. The object of this committee is to give consideration to economic and service problems arising in the service of ophthalmology. The committee will coöperate with the county and state medical societies and such other organizations as have an interest in these problems.

* * *

Dr. J. Milton Robb of Detroit was honored by the board of trustees of the Wayne County Medical Society in a unanimous resolution memorializing his signal service to both the Michigan State Medical Society and the Wayne County Medical Society. He has tendered his resignation as a member of the board of trustees. Dr. Robb was president of the Wayne County Medical Society, 1930-31, and of the Michigan State Medical Society, 1932-33.

July, 1936

Invitational golf at Detroit Golf Club will be a feature of the Detroit Convention of the M.S.M.S. Members will play on Tuesday, September 22, 1:00 p. m. Dr. C. D. Brooks, chairman, informs us that both eighteen hole courses are always in beautiful shape, and that the cuisine at the Detroit Golf Club is famous. Prizes will be awarded to experts, duds and beginners. If interested, drop a card to Chairman of Golf Committee, 2020 Olds tower, Lansing.



Lost Ball vs. Dandelions.

* * *

The Detroit Branch of the American Urological Association elected the following officers for the coming year: President, Dr. James Magoun, Toledo, Ohio; Vice President, Dr. William J. Butler, Grand Rapids; Secretary-Treasurer, Dr. George C. Leckie, Detroit; Executive Committee—Dr. Robert S. Breakey, Lansing, Dr. J. K. Ormond, Detroit, and Dr. L. W. Hull, Detroit.

* * *

Dr. Henry Cook, Flint, Chairman of the Council of the Michigan State Medical Society, was guest speaker at the Annual Meeting of the Michigan Association of Probate Judges in Traverse City on Thursday, June 25, 1936. Dr. Cook, invited by President Ruth Thompson, Probate Judge of Muskegon County, spoke on "Opportunity for Coöperation between the Probate Judge and the Physician."

* * *

Dr. Walter J. Cree of Detroit received the honorary degree of Master of Science at the annual convocation of the Wayne University. The citation was as follows: "In addition to his contributions to medicine, Dr. Cree is a valued member of the Michigan Historical Society, deeply interested in music, painting and photography. He is a physician of wide cultural interests who is a good citizen and a social benefactor."

* * *

Dr. David Sugar succeeds Drs. Harold Mack and Clyde Hasley as editor of the *Detroit Medical News*. Dr. Sugar is by no means a novice in editorial work. His sabbatical year, if such it may be called, should bring to the position renewed energy and freshness. While congratulating Dr. Sugar on his reappointment, we wish also to pay our respects to the commendable efforts of his predecessors.

* * *

It is of interest to note that the State Forensic Association has determined that the subject for debate for the school year 1936-37 for Michigan is not to be the question of "State Medicine." Dr. William P. Halstead, Director of the State Forensic Association, at the University in Ann Arbor, recently sent out a referendum to the debating coaches throughout the state, and the question agreed upon for the coming season has to do with the government ownership of power and light plants. The exact wording of the resolution to be debated has not been determined as yet.

"W. D. Rea, M.D., of Minneapolis, Minnesota, has been cited to appear before the Michigan State Board of Registration in Medicine at its meeting in the Hotel Olds in Lansing on Tuesday, October 13, to show cause why his license to practice medicine, surgery and midwifery in this state should not be revoked or suspended. The charge is that grossly improbable statements have been made in his advertisements. Dr. Rea has been appearing in Hillsdale for many years."—From the *Hillsdale Daily News*, June 16, 1936.

* * *

Dr. L. G. Christian of Lansing and Dr. A. G. Sheets, Eaton Rapids, addressed the St. Joseph County Medical Society at the Slinger Lake County Club, Sturgis, on June 10, 1936. Dinner was served to the members of the county medical society and Probate Judge Edward E. Harwood of Hillsdale County and the guests. Dr. Christian spoke on "The Integration Work of the Michigan State Medical Society." Dr. Sheets' subject was "How the State Society is Working for You as an Individual Practitioner."

* * *

Dr. L. Fernald Foster addressed the Allegan-Van Buren Medical Clubs at Allegan on Wednesday, June 17, on "The Integration Program of the Michigan State Medical Society." Three other members of the State Society's PRC were present and addressed the group: Drs. F. T. Andrew of Kalamazoo, Roy H. Holmes of Muskegon, and A. V. Wenger of Grand Rapids. Thirty-one members of the Medical Profession were present, and also Probate Judge Irving J. Tucker of Allegan, and Probate Judge Merle H. Young of Van Buren County.

* * *

The School Health Committee, a part of Section II of the Medical Economics Commission, Wayne County Medical Society, reports that plans are being perfected in cooperation with the Detroit Department of Health whereby school children will be vaccinated in the offices of private physicians, along the lines of Detroit's diphtheria prevention program. The campaign will be accompanied by a continuous educational program of a city-wide nature urging parents to take their children to their own private physicians for their service.

* * *

Admissions to the General Sessions at the 71st Annual Meeting of the Michigan State Medical Society, Book-Cadillac Hotel, Detroit, September 21 to 24, 1936, will be by badge only.

This ruling is made to protect members of the Michigan State Medical Society, who otherwise might be crowded out by non-members who wish to attend the various functions of the meeting. This rule will apply also to the Smoker, planned by the Wayne County Medical Society for Tuesday September 22, 8:00 p. m. Monitors will be stationed at all doors to see that this rule is carried out.

* * *

"We have been interested in hearing reports about the Michigan State Medical Society's Annual Meeting of 1936, and would like to exhibit at this session." The above statement came in a letter from a business house located in Newark, N. J. It is a result of a "boost" for the Michigan State Medical Society's Annual Meeting given to the representative of this pharmaceutical concern by an interested and enthusiastic member of the State Society.

Doctor, in your contacts with detail men, mention the Exhibit of the Michigan State Medical Society, Detroit Session, September, 1936; also mention "The Detroit Number" of THE JOURNAL—September issue, which will be a souvenir program of your Annual Meeting.

Certain alleged unethical conduct in one of the Councilor Districts has been called to the attention of the Executive Committee of The Council. The particular county medical society in which these alleged overt acts are said to have taken place has been invited to investigate and report to the Executive Committee as per Chapter IX, Section 3, of the By-laws of the Michigan State Medical Society: "In the event that a member's conduct, actions or professional labors reflect violation of said provisions (of the Constitution and By-laws of his county society and of the Michigan State Medical Society), and in the event of failure on the part of his county society to exercise disciplinary action upon him, The Council after due notice and hearing may cause his expulsion."

* * *

The Interne Alumni Association of Providence Hospital held their second annual convention at Providence Hospital, Detroit, on June 10 and 11. The first day was devoted to operative clinics, commercial and scientific exhibits and three clinical addresses as follows: "The Significance of Benign and Malignant Hypertension," by Dr. Francis D. Murphy, Professor of Medicine, Marquette University School of Medicine, Milwaukee, Wisconsin; "Hypertension and Treatment," by Dr. Max Peet, Professor of Neuro-Surgery, University of Michigan Medical School, Ann Arbor, Michigan; "Gastric Surgery," by Dr. Waltman Walters, Associate Professor of Surgery, University of Minnesota, Graduate School of Medicine, Mayo Clinic, Rochester, Minnesota.

* * *

The President of the Ingham County Medical Society, Dr. E. I. Carr of Lansing, has appointed an Historical and Biographical Committee composed of Dr. C. B. Gardner as chairman, Dr. H. S. Bartholomew, Dr. Karl B. Brucker, Dr. W. G. Wight, and Dr. Harry A. Wilson. In making the appointment, President Carr stated: "In the selection of this committee I have been mindful of the especial interest in persons and incidents of by-gone and early days. We are all aware that the chairman has already a considerable accumulation of valuable material. We have all been entertained by tales of the old days by all of the other members of the committee. Their job is a big one and one which will carry far into the future. It is the duty of everyone to aid the committee in this work in every way possible."

* * *

The Michigan Alumni Association of Alpha Kappa Kappa, held a meeting at the Michigan Union, Ann Arbor, Thursday, June 18, the graduating group from the Ann Arbor Chapter being guests of the Alumni. There were about fifty members present, representing various sections of the state, and the following named chapters were represented: Alpha Rho, Alpha Chi, Alpha Iota, Kappa, Mu, Nu, Pi, Zeta, Eta, and Xi. During the dinner, popular and fraternity songs were enjoyed by all. Dr. Albert B. Landrum, grand secretary-treasurer, Columbus, Ohio, gave an interesting talk, relating points of historic interest in the development of Alpha Kappa Kappa. Dr. George M. Curtis, Professor of Surgery, Ohio University, addressed the Association, his subject being "The Story of Biological Iodine."

The annual meeting will be held in Detroit, Tuesday, September 22, 6:00 to 8:00 P. M., the program to consist of a short business meeting, election of officers, and short round-table discussions. The national officers will be invited to attend this dinner-meeting.

The committee on arrangements is in the hands of the Executive Committee, consisting of President

Homer A. Ramsdell, of Manistee, Secretary Thomas J. Carney, of Alma, President-Elect C. S. Tarter, of Bay City, Secretary-Elect L. Fernald Foster, of Bay City, Dr. H. S. Broderson of River Rouge, and Dr. Rockwell M. Kempton, of Saginaw. The place of the meeting will be announced at a later date.

* * *

The Medical Women's National Association, Michigan Branch Program in Detroit on the occasion of the Annual Meeting of the Michigan State Medical Society, will be as follows:

Tuesday, September 22, 1936

8:00 A. M.—General Session

12:00 Noon—Luncheon. Dr. Mary B. Campbell presiding

2:00 P. M.—Business Session (Election of Officers)

7:00 P. M.—Dinner. Dr. Bertha Salmon presiding. Speaker, Dr. Bertha Van Hoosen. "Our Medical Authors"

Wednesday, September 23, 1936

8:00 A. M.—Breakfast. The Blackwell Society, Dr. Grace Perdue presiding.

12:00 Noon—Luncheon. Dr. Pearl Christie-Dowling presiding. "Blackwell Pioneers." Speakers: Dr. Mary Thompson Stevens, Dr. Susanne Sanderson, Dr. Jeanne Solis.

Thursday, September 24, 1936

8:00 A. M.—Breakfast. Michigan Medical Women. Dr. Kathryn Bryan presiding. "Mental Hygiene Problems"

12:00 Noon—Luncheon. Dr. Frances Ford presiding. "Our International Cancer Study Problem"

Locations to be arranged.

* * *

The Bulletin of the Genesee County Medical Society has inaugurated a new column entitled "The M.S.M.S. Public Relations Committee Believes . . ."

The May issue of the *Genesee Bulletin* mentioned the following three points:

"The M.S.M.S. Public Relations Committee Believes . . ."

"(1)—That there are many preventive medical procedures which can be more efficiently and effectively carried on through the cooperation of qualified and properly prepared practicing physicians, co-operating physicians rendering services in their own offices. Every practicing physician should become in fact a practitioner in preventive as well as curative medicine.

"(2)—That portion of the program for the protection of young children against smallpox and diphtheria has been found an excellent means of stimulating the interest of the practicing physician and has served as a stepping stone in a program involving general medical participation in public health services.

"(3)—That the two prime essentials are first, an alert and interested local medical profession, and second, a full-time local health department, the function of which shall be purely administrative and educational, and not actively engaged in practice of medicine."

* * *

Please Note: Detroit, Grand Rapids, Flint, Houghton, Port Huron:

The field staff of the National Health Survey carefully trained in gathering detailed, accurate information, has completed the extensive canvass of chronic and disabling illness conducted by the United States Public Health Service in nineteen states.

When the study was initiated last fall, the pro-

gram was discussed in the October 5 issue of the *Journal of the American Medical Association*. As announced at that time, there was special realization of the great value that would accrue to this scientific survey if supplementary facts could be obtained from physicians in cases of medically attended illnesses. Accordingly, when medical attendance was reported, permission to secure additional data from the doctor was requested of the family by the field worker. Assured that the information would be regarded as confidential and would be used for purposes of statistical compilation only, families were cooperative in granting the privilege of confirming diagnoses.

Appropriate forms are now being received by the attending physicians named by informants, and the Health Survey is asking the cooperation of members of the medical profession in this very important phase of the study. It will be appreciated if you will announce the confirmation plan to your Society, urging the desirability of having the forms returned as promptly as possible.

For each form filled and returned the physician will receive a fee of twenty-five cents, a small compensation for the service he will render in executing the blank. By supplying the information requested he will contribute invaluable data to this study and assure the scientific accuracy of the results.

T. R. THOMPSON,
Acting Surgeon General.

* * *

Allegan County Desires Medical Society Charter

—The Allegan-Van Buren Medical Clubs held a joint meeting in Allegan on Wednesday, June 17, at the Ot-Well-Egan Country Club. A round of golf was followed by dinner and an evening devoted to discussion of the afflicted-crippled child problem, the filter system and the desirability of creating a county medical society in Allegan County.

Dr. L. Fernald Foster, chairman of the State Society Public Relations Committee, was guest speaker. He outlined the integration program of the Michigan State Medical Society and detailed the filter system. Other members of the State Public Relations Committee discussed the work done to date: Dr. F. T. Andrews of Kalamazoo, Dr. R. H. Holmes of Muskegon, and Dr. A. V. Wenger of Grand Rapids. Probate Judges Irving Tucker of Allegan County and Merle H. Young of Van Buren County entered into the discussion and spoke highly of the purpose of the filter system. The judges pledged full cooperation.

Wm. J. Burns, Executive Secretary of the State Medical Society, spoke briefly on the work of the State Society and plans for the annual meeting in Detroit, September, 1936. Dr. F. M. Doyle, secretary of the Kalamazoo Academy of Medicine, also spoke on the aims and purposes of organizational work.

The Allegan Club, after discussing the advantages and disadvantages of incorporating as a county medical society, voted affirmatively on the question. A Constitution and By-Laws will be drafted and presented to the State Society's Council with a request for a charter as "The Allegan County Medical Society."

Among others present at this interesting meeting were: Drs. E. B. Johnson, R. H. MacNeill, O. H. Stuck, J. H. VanNess, C. C. Flinn, M. B. Beckett, G. E. Ramseyer, W. C. Medill, G. H. Rigterink, C. C. Corkill, J. E. Mahan, R. J. Walker, E. T. Brunson, Bert VanDerKolk, H. J. Damstra, W. R. Vaughan, E. D. Osmun, W. B. House, B. F. Horner, O. D. Hudnutt, Amos Everett, all of Allegan County; Drs. J. C. Maxwell, Wilbur F. Hoyt, C. A. Wilkinson, of Van Buren County.

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column and this will be deemed by us a full compensation to those sending them. A selection will be made for review, as expedient.

HANDBOOK OF SURGERY. By Eric C. Mekie, M.B., Ch.B., F.R.C.S. (Edin.), Medical Officer, Malayan Medical Service; Formerly University Tutor, Royal Infirmary, Edinburgh; Assistant, Department of Clinical Surgery, University of Edinburgh; Surgical Specialist, Military Hospital, Scottish Command. With a Foreword by John Fraser, M.C., M.D., Ch.M., F.R.C.S.; Regius Professor of Clinical Surgery, University of Edinburgh. Baltimore: William Wood & Co., 1936.

This handbook is a clear, concise discussion of subjects usually found discussed in a work on surgery. It takes the subjects up in the usual order and without waste of words gives the reader a good account of the topic from the standpoint of etiology, symptoms, pathology and treatment. For the busy practitioner, who wants a general idea of the subject without exhaustive detail, it has a place in the library.

THE COLLECTED PAPERS OF THE MAYO CLINIC AND THE MAYO FOUNDATION. Edited by Richard M. Hewitt, B.A., M.A., M.D., Lloyd G. Potter, and A. B. Nevling, M.D. Volume XXVII (Papers of 1935—Published 1936). Octavo of 1353 pages with 256 illustrations. Philadelphia and London: W. B. Saunders Company, 1936. Cloth, \$12.00 net.

In the preface of this volume, it is stated that six hundred ninety-three articles were written by the Mayo staff during 1935. These appear in the present volume as follows: eighty-three in full, fifty-seven by abridgment, ninety-five abstracted, and four hundred fifty-eight published by title. These annual volumes may be looked upon as presenting recent advances in medical science for the year. The papers which comprise the seventeenth volume are classified under the following heads: Alimentary Tract, Genito-Urinary Organs, Ductless Glands, Blood and Circulatory Organs, Skin and Syphilis, Head, Trunk and Extremities, Chest, Brain, Spinal Cord and Nerves, Radiology, Anesthesia and Gas Therapy, Technic, and Miscellaneous. We have therefore a fairly complete single volume embracing the practice of medicine and surgery. The volume is well illustrated and well indexed. Of the quality of the articles, little need be said since the Mayo Standards for thoroughness are universally recognized.

DISEASES OF THE RESPIRATORY TRACT. Clinical Lectures of the Eighth Annual Graduate Fortnight of the New York Academy of Medicine: By 21 contributors. 418 pages with 56 illustrations. Cloth, \$5.50. Philadelphia & London: W. B. Saunders Company, 1936.

This work has been produced under the auspices of the New York Academy of Medicine, which was originated more than eighty years ago. In their constitution, the founders of the Academy mentioned four objectives, one of which was educational. The present volume is in keeping with this policy inasmuch as it is made up of papers or chapters, twenty-one in number, which deal with diseases of the respiratory tract. The work is of composite authorship and takes up most of the commoner pathologic conditions of the respiratory tract; the exceptional or unusual are relegated to a minor place. Since respiratory diseases constitute a major cause of indisposition, little need be said in extenuation of a volume such as this. It will be found to contain newer conceptions of diseases of the respiratory tract. The work is well illustrated and well indexed for ready reference. It will be found a serviceable volume particularly to the general practitioner.

AMERICAN MARTYRS TO SCIENCE THROUGH THE ROENTGEN RAYS. By Percy Brown, M.D., F.A.C.P., F.A.C.R., Historian and Former President, American Roentgen Ray Society; with a short glossary of the scientific terms used in the text. Springfield, Illinois, and Baltimore, Maryland. Charles C. Thomas, 1936.

The story of the fatalities among pioneer workers with x-rays and radium is well known. No other medical specialty has had such a mortality during a similar period of its evolution. Dr. Brown's book contains twenty-seven biographies of workers in the field, including one woman, whose untimely deaths have been attributed to the effects of x-rays. Of recent years, however, the subject of protection of both operator and patient has received a great deal of attention, so that the modern radiologist is in a position to protect himself; not only this but the manufacturers of x-ray apparatus have surrounded such apparatus with all safeguards possible in the way of tubes encased in lead and shockproof apparatus. However, this work is not only a warning but it is a story of heroic self-sacrifice and, as such, it should appeal to all, through its human interest.

EVAN'S RECENT ADVANCES IN PHYSIOLOGY. Fifth edition. Revised by W. H. Newton, M.D., M.Sc. (Manch.); Senior Lecturer in Physiology, University College, London, with 120 illustrations. Philadelphia: P. Blakiston's Son & Co., Inc., 1936.

In this "Recent Advances in Physiology," the author, without attempting to cover the subject of physiology as a whole, takes up certain definite subjects and discusses the more recently acquired knowledge concerning them. Three chapters are given to the regulation of circulation and metabolism of the heart. Two more give a highly technical discussion of the chemistry of carbon dioxide in the blood. The fetus comes in for a chapter in a discussion of its oxygen supply. Sex hormones are summarized in the light of recent investigation. Nerve excitation and conduction and the spinal reflex are discussed and tables, graphs and drawings are shown to illustrate the text. A chapter is given to the nervous control of micturition and defecation and another to the subject of the physiology of urinary secretion. Each chapter is followed by a bibliography.

MAN, THE UNKNOWN

Few books of the past decade have excited the interest of thoughtful people, and particularly members of the medical profession, as has *Man, the Unknown*, by Dr. Alexis Carrel. The following review by Sir Arthur Keith is taken from the *British Medical Journal*. As a great personality in the scientific world Sir Arthur Keith is on par with Dr. Carrel. Sir Arthur was born in Aberdeen, Scotland, in 1866. After studying medicine in Aberdeen, London, and Leipzig, he became one of the leading anthropologists of the world, and an expert on the reconstruction of prehistoric man from fragmentary fossil remains. He was for some time secretary and later president of the Anatomical Society of Great Britain. He is at present curator of the Hunterian Museum of the Royal College of Surgeons. This review is here reprinted on account of its inherent interest, describing as it does a book that has had wide appeal particularly to the thoughtful general reader. The author of this review is a personage whose writings are eagerly sought by

Jour. M.S.M.S.

all those who have an interest in the biological sciences.—Ed. Regarding Dr. Carrel and his book, Sir Arthur Keith writes:

My friend, Dr. Raymond Pearl, has drawn a comparison between Dr. Carrel's *Man, The Unknown*, and Carlyle's *Sartor Resartus*, adding that "in some respects" the former "is the better book." There are some resemblances of a metaphysical kind, but the differences between them are profound. The life which Dr. Carrel describes is that seen through a laboratory window which looks out on the sophisticated life of New York, whereas Carlyle's study window opened out on the wind swept moors of Craigenputtock. Dr. Carrel sees the world through a film of "tissue culture," Carlyle saw it through the mystical haze of a Calvinistic philosophy. It is true that in both cases we have to deal with disgruntled men who suffer from some strange form of mental astigmatism; both have assumed the mantle of Jeremiah in the midst of a world which they conceive to be evil. Carrel, like Carlyle, is a hero worshiper and a contemner of democracies. Carrel, like Carlyle, believes humanity has to be retailed, but, unlike Carlyle, he thinks the new suit must be cut under scientific guidance.

The book with which I prefer to compare *Man, The Unknown*, is one written fully thirty years ago by Eli Metchnikoff. He named it *The Nature of Man*. It is strange that the one book was written by a Russian biologist who made his home in France, while the other is from the hand of a French biologist who has spent his working life in America. It is true Dr. Carrel claims to be a surgeon. Like Lord Moynihan, he speaks of the godlike office of the surgeon; but nevertheless, like all great surgeons, he is at heart a biologist, and, as we now know, also a philosopher. So was Metchnikoff, but Carrel's philosophy is more robust and all-embracing. Metchnikoff was convinced that the evolution of civilization had far outstripped that of man's body and called in the surgeon to remove the big bowel and other parts which he believed to have become superfluous. Dr. Carrel's diagnosis is different: he is convinced that man's body is still sound, but that he has surrounded himself with a civilization that is suffocating him—squeezing out his intelligence, his morality, his personality and his happiness. He proposes to reform humanity by calling in, not a surgeon, but a junta of superphysicians. The reformers are to be segregated in a superinstitute, modeled on the lines of the Rockefeller Institute for Medical Research in New York; they are to elaborate and apply a science of morals as well as the other sciences which normally fall within the purview of modern medicine. They have to see to it that "mind" stands above "matter," that men and women imprisoned in big factories and offices are set free to work out their "personalities." Our reformers are to think, not of the advancement of material things, but of man's progress. How far the superinstitute is to replace our regularly constituted governments is not disclosed. The cause of reform is also to be aided by a voluntary fascist organization—of a kind which has been so successful of late in Italy, Germany and Russia. Also the cause will be assisted by eugenical measures—such as we have been made familiar with in Britain since the time of Galton.

Viewed across the width of the Atlantic we had judged Dr. Carrel to be the most fortunate of men. We supposed him to be the last of all men to find fault with our civilization, seeing that it was able, just when his time came, to open the door

of opportunity to his budding genius. Let us consider his career for a moment. Born in France and bred to medicine in the University of Lyons, he found himself in New York in 1905. He was then 32 years of age. The doors of the Rockefeller Institute for Medical Research were thrown open to him. This institute, the creation of modern civilization, with its big regimented businesses, provided the opportunities which Dr. Carrel stood in need of in 1905. By 1912 he had established his fame. In that year, while Dr. Carrel was still under 40 years of age, he was awarded a Nobel prize for his work on the suturing of wounded blood vessels and on the maintenance of life in organs and parts removed from the living body. Again, he was benefited by the munificence of an industrial magnate. Plainly, when Dr. Carrel wishes to annihilate the modern organization of industry he can not be moved by any personal grudge. Still, for the sake of future Carrels we do hope that he will defer his plans for economic revolution. Even his superinstitute for world reform will depend on big business for its maintenance.

Let no one lose heart over the aridity of the earlier chapters. Presently come those which are green and fertile. In these Dr. Carrel, in the clearest of phrases, expounds the new aspects of living matter which have been revealed to him in his laboratory. Every fact cited is one which he can demonstrate, every result mentioned is one capable of verification. His methods relied on in these fertile chapters are those regarded as valid by all men of science. But presently readers will find themselves in realms where the writ of science is not yet valid—where faith rules rather than fact. Dr. Carrel will have his readers believe that there are men who come by powers such as are usually reserved for the deity—namely, those of "reading the thoughts as easily as faces," of seeing future events while they are still hid in the womb of time, of sending and delivering mental messages to friends on the other side of the earth. Dr. Carrel is convinced that prayer can cause a wound to heal at a much quicker rate than is normal, and that the patient need not participate in the supplication to gain such gratifying results. Yet although a follower of Richet he apparently does not believe in the existence of spirits nor in the supernatural powers of mediums. He is inclined to believe that the brain may be capable of throwing out waves which may prove to be akin to electromagnetic waves. He believes in asceticism and in mysticism; fasting is advocated as an exercise in mental therapeutics. Dr. Carrel believes in the existence of a psychic principle, capable of evolving outside the living human body. He believes that genuine miracles do happen; mystics can work them. And yet, strange to say, he regards the human soul as being inseparable from the human body. Indeed, he is convinced that the doctrine of the separability of the soul is responsible in part for the threatened collapse of civilization. And then, again, he holds that there will be peace for the world of humanity only when the human mind is freed from materialism and is able to pass freely outside the bounds of our present universe to where time and space are not. Dr. Carrel the man of science shelters under the same hat as Dr. Carrel the mystic.

Our author has the clear, emphatic style of French writers. His sentences are short, seldom extending beyond a line and a half, and often have the piquancy of aphorisms, as the following quotations will illustrate: "The sound body lives in silence." "Wealth is as dangerous as ignorance and poverty." "We are not able to fight successfully against misery

or poverty." "Each one, in a certain measure, is born good, mediocre, or bad." "Body and soul are views taken of the same object." "They are saints—that is, those who are virtuous in a heroic manner." "Great scientists always have profound intellectual honesty." "Thought grows only within those who are capable of love and hate." "A great artist, a great scientist, a great philosopher is rarely a great man." "The lengthening of man's senescent period would be a great calamity." "It would not be wise to give everybody a long existence." "The aging man should neither stop working nor retire." "The passion for conquest inspires all great adventures." "In the poor as well as in the rich, leisure engenders degeneration." "There are as many different diseases as patients."

I have thought it well to discuss *Man, The Unknown*, at considerable length because of the high position occupied by its author in the realms of orthodox medicine. The ideas and doctrines which Dr. Carrel has enunciated in this book will evoke reverberations in medical and scientific circles for many a year to come. Those of us who believe that the art of healing can be advanced only by careful observation, clear-cut experiment, and sound reasoning will have Dr. Carrel cast in our teeth by charlatans, Christian Scientists, and faith healers, who believe there is a shorter road. Medical men ought to be familiar with *Man, The Unknown*. In reality, it reveals more concerning Dr. Alexis Carrel than about Man.

Radiotherapy (Roentgen Rays; Radium)

Arthur U. Desjardins, Rochester, Minn. (*Journal A. M. A.*, Dec. 21 and 28, 1935), asserts that each variety of cell in the body is specifically sensitive to roentgen rays or radium. When cells of a given kind are exposed to a certain dose of radiation, some are destroyed, some are injured but regenerate later, and some do not show any deleterious effect. All cells, whatever their variety, may be destroyed or injured if exposed to a sufficiently large dose of rays, especially if doses within the therapeutic range are disregarded. The exceptional sensitivity of lymphocytes was established by the early experiments of Heineke and has since been fully confirmed by others. The destruction of these cells is characterized by disorganization and fragmentation of the nuclear chromatin and by scattering of the fragments of chromatin between the remaining intact cells and in the spaces of the reticular stroma, where the fragments gather into clumps or balls. The extent and the duration of this destructive phase depend on the intensity of irradiation. Next to the lymphocytes in sensitivity to roentgen rays are the polymorphonuclear and eosinophil leukocytes in the circulating blood or in the tissue spaces of different organs. The small round cells of the thymus react at the same rate and undergo the same changes as the lymphocytes of the spleen, lymph nodes, intestinal lymph follicles, bone marrow and circulating blood. The basal epithelial cells of the salivary glands are actually more sensitive to radiation than the polymorphonuclear and eosinophilic leukocytes, as evidenced by the fact that, whereas microscopically perceptible changes in the last two varieties of cells can seldom be found within the first six hours after exposure to the rays, clinical signs of salivary reaction can usually be observed in from three to six hours after irradiation. The testis is not as sensitive as some of the leukocytes or as the salivary glands, but, with the exception of these, it is the most sensitive structure in the body. The radiosensitivity of the ovary is essentially the same as that of the testis, and the cells to which the specific susceptibility of the gland is due are the

ova and the epithelial cells of the follicles. The skin can tolerate with impunity a considerable single dose of roentgen rays, but when its limit of tolerance is exceeded it may undergo a series of reactive changes. The sensitiveness of the epithelium of mucosa membranes is much the same as that of the skin. The radiosensitivity of specialized mucous membranes, such as the mucosa of the stomach and intestine, varies with each structure. Young, freshly formed connective tissue cells are more radiosensitive, and mature connective tissue cells are less sensitive to irradiation, than the epithelium of the skin. The cells that typify voluntary or involuntary muscles also may be injured or destroyed by exposure to roentgen rays beyond therapeutic limits. Sufficiently intense irradiation, in either single or repeated exposures, may cause bone cells to degenerate. The neurons of the central nervous system possess the highest degree of resistance to roentgen rays. Continued acceleration of metabolism cannot be produced by exposure to any dose of roentgen rays or radium, which always cause degenerative changes or have no effect whatever. Repeated irradiation of certain tissues, such as the skin, over a long period of time may cause hyperplasia of the epithelium, and this in turn may lead to malignant transformation. This is alteration of a normal to an aberrant function due to chronic irritation. Under the subtitle of clinical radiotherapy the author states that too much stress on radium or on roentgen rays has been laid by certain writers who, not possessing both agents, have naturally tended to stress the agent which they happened to possess. In a general way radium is preferable when the lesion is well defined, of limited size, and situated at the surface or readily accessible from the surface. In the case of a sarcoma of the shoulder, a carcinoma of the lung, a lymphoblastomatous process of the mediastinum or abdomen, an embryoma of the kidney, or a tumor of the testis with metastasis to the para-aortic (retroperitoneal) lymph nodes, adequate irradiation can usually best be done with roentgen rays. Such lesions can be treated with radium only in a few institutions where a quantity of radium large enough to permit external irradiation under satisfactory conditions is available. In carcinoma of the breast, radium or radon can sometimes be implanted throughout and around the primary growth, but this and the tributary lymphatics should also be irradiated from the outside, either with roentgen rays or with radium. The following subheads are considered under clinical radiotherapy: internal administration of radium, inflammatory diseases, radiation sickness, the Coutard method and irradiation at high voltages.

The Feeding of Modified Gastric Juice in Pernicious Anemia

Frederic M. Hanes, O. C. Hansen-Prüss, and J. W. Edwards, Durham, N. C. (*Journal A. M. A.*, June 13, 1936), repeated Greenspon's experiment (of feeding pernicious anemia patients normal gastric juice so treated as to inhibit the action of pepsin), adhering strictly to his technic, in five typical untreated cases of pernicious anemia. Fifteen normally healthy medical students have acted as donors of gastric juice, which in every instance has been tested for the presence of free hydrochloric acid. Histamine (0.1 mg. per kilogram of body weight) alone was used to stimulate the flow of juice, and if there was evidence of food contamination the specimen was discarded. This method of treatment produced no subjective or objective improvement in the patient's condition. No evidence of increased erythropoiesis was observed, either in the bone marrow or in the circulating blood.

THE JOURNAL

OF THE

Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. 35

AUGUST, 1936

No. 8

OPERATIVE TREATMENT OF GASTRIC AND DUODENAL ULCER: PHYSIOLOGIC AND PATHOLOGIC PRINCIPLES INFLUENCING THE TYPE OF PROCEDURE*

WALTMAN WALTERS, M.D.

Division of Surgery, The Mayo Clinic
ROCHESTER, MINNESOTA

I have been asked to report experience at The Mayo Clinic in the surgical treatment of peptic ulcer, with particular reference to the ultimate effect of the various surgical procedures; that is, suturing, gastro-enterostomy, pyloroplasty, and partial gastrectomy. In order to cover this rather large assignment in the time available, it will be possible to emphasize only those points which seem to be of greatest importance. If one is to attempt to evaluate results from a statistical report, understanding of the etiologic, pathologic, and clinical features of gastric and duodenal ulcer is necessary, so that the reason for the choice of one of several operative procedures is understood.

I might illustrate by reference to cases of perforated duodenal ulcer in which leakage into the abdominal cavity has occurred and which all physicians recognize as constituting surgical emergencies. Immediate closure of the perforation is of paramount importance. Whether the perforation is closed as a part of the operation of gastroduodenostomy (gastric resection), or whether it is combined with gastro-enterostomy is dependent on the condition of the patient, the degree of general peritonitis present and the experience of the surgeon. Obviously the opening must be closed and inexperienced surgeons and many of the most experienced surgeons are content with closure of the perforation. Others feel, and demonstrate by statistics, that an operation of the magnitude of gastric resection can be carried out in cases in

which the perforation is of short duration at a risk that is but little greater than that of simple closure and gastro-enterostomy. Happily there continues to be disagreement with this opinion.

The decision as to whether gastro-enterostomy or pyloroplasty should be done at the time of closure of the perforation will vary according to the size of the lesion, the effect of its closure in producing obstruction of the duodenum and whether its removal can be safely combined with reconstruction of the pyloric outlet. The point which I wish to make is this: regardless of the etiologic factors in the development of perforating ulcer in these cases, regardless of the method of surgical treatment selected, saving the life of the patient is the immediate object.

After performance of a very difficult, tedious operation before some foreign visitors, W. J. Mayo concluded his remarks by saying that he hoped a hernia would develop. The point was that the patient must

*Read before the Medical Section of the American Life Convention, White Sulphur Springs, Virginia, June 11 to 13, 1936; also read before the Providence Hospital Interne Alumni Association, Detroit, Michigan, June 9, 1936.

recover from the essential operation even at the expense of the development of a hernia, for the hernia could be repaired safely at a later time.

I think the general experience of most surgeons, following simple closure of a perforating duodenal ulcer, is that 60 per cent of patients are relieved of their symptoms. With the remainder, indiscretions in habits of living seem to be a large factor in their dyspepsia. If, however, symptoms of obstruction or hemorrhage occur, secondary operation may be required, and the type of operation to be preferred will be discussed in detail when considering the selection of operations for duodenal ulcer.

Gastric Ulcer

I should like to depart abruptly from further discussion of duodenal ulcer in order to turn to a consideration of gastric ulcer, which I believe is of greater importance, although it occurs much less frequently than does duodenal ulcer. For reasons which are probably obvious, but which I hope will be made convincing in the following remarks, the physician always should determine whether a "peptic ulcer" is in the stomach or duodenum. Both pathologically and biologically the lesions differ: pathologically, because ulcerating lesions of the stomach, with all of the clinical characteristics of a benign lesion, may be malignant, whereas ulcerating lesions of the first portion of the duodenum are never malignant; biologically they differ in their response to various surgical procedures, particularly in relation to reduction of acidity and to the incidence of recurring ulceration. Regardless of the type of operation performed for benign gastric ulcer, if in the course of the procedure the lesion is removed and a method is afforded for the stomach to empty rapidly, the gastric ulcer practically never recurs. If chemical analysis for gastric acids discloses uniform reduction of hydrochloric acid to minimal figures, one of the prerequisites for a satisfactory result in the surgical treatment of either gastric or duodenal ulcer has been met. The fear of malignancy developing in an ulcerating gastric lesion is well founded and I do not believe sufficient importance has been accorded the possibility. Among several hundred patients who were operated on at The Mayo Clinic for malignant lesions of the stomach, many gave histories identical with that

which is associated with benign ulcer of the duodenum and many of these patients had been under a medical regimen for many months elsewhere without a roentgenologic examination ever having been made to determine the situation of the ulcer. I think this is a point which is well worth emphasizing: a medical regimen should not be prescribed for any patient who has what seems to be a duodenal ulcer without a roentgenologic or a fluoroscopic examination being made to exclude the possibility that the lesion is an intragastric one; if it is intragastric the possibility of malignancy should be suspected. It is true that probably from 15 to 20 per cent of gastric ulcers may become malignant but, at the same time, statistics are not available to show the number of early ulcerating carcinomas which start with a history suggestive of a benign lesion. For this reason, even though, under a medical regimen, ulcerating lesions of the stomach seem to disappear as far as fluoroscopic examination will disclose, and the patient's symptoms are relieved, and blood disappears from the stools, the patient should be examined every three months the first year and every six months the second, to make sure that recurrence has not taken place. At the clinic we have seen gastric lesions appear to have healed, only later to recur, and when the patient was operated on the lesion occasionally proved to be malignant.

I believe it would be a good plan if physical examination of every patient more than forty years of age included roentgenologic examination of the stomach, duodenum, and colon, particularly (1) if the patient has persistent or intermittent dyspepsia or (2) if there is a family history of cancer. This would make possible determination of the presence of small carcinomatous gastric lesions in their early stages. If progress is to be made in the treatment of carcinoma of the stomach, methods must be established which will permit earlier recognition of the lesion so that it can be removed while the process is still local. Therefore, the preferable operation in the treatment of ulcerating gastric lesions is obviously removal of the lesion and of as much of the adjacent tissue as is possible within reason, including possible areas of extension of the gastric lesion into the gastric wall and possible metastatic lesions in the lymph nodes of the omentum. This particularly applies to the large gastric

ulcer with a crater of 2 cm. or more in diameter. Excision of a benign gastric ulcer, combined with gastro-enterostomy, is an excellent operation providing the ulcer can be proved microscopically to be benign. This operation is usually a safe one for the surgeon who has average experience in intra-abdominal surgery. As was previously mentioned, recurring ulcers in such cases are exceedingly rare. Certain large, inaccessible gastric ulcers, particularly those high on the posterior wall or on the lesser curvature, removal of which would carry an unusually high risk because of their size and situation, have been demonstrated to heal after gastro-enterostomy. The explanation for this probably lies in the neutralization of gastric acidity and the rapid emptying of the stomach resulting from this operation.

Duodenal Ulcer

I reserve for last and detailed discussion the question of duodenal ulcer. I think it is one of the outstanding problems with which members of the medical profession have to deal today. Evaluation of results is difficult because of the variety of viewpoints relative to the best method of surgical treatment when such treatment is indicated and the factor that is most important in producing this difficulty is that the etiology of ulceration is not clear. That gastric secretion, namely hydrochloric acid, acting on abnormal intestinal tissue will produce ulceration has been proved experimentally by Mann¹⁴ and by others,⁶ and that individual susceptibility of tissue to acid secretion is variable is evident. What may be an effective method of surgical treatment for ulcer of the duodenum as it affects one group of patients may have either better or less satisfactory results in treatment of a different group of individuals.

In a recent number of the *Journal of the American Medical Association*⁴ the importance of geomedical knowledge was emphasized by Schittenhelm, the Munich internist, who, gathering data from various parts of Germany, emphasized the fact that diseases frequently present different characteristics even in localities where they first appear. I quote a few sentences from his report: "Apoplexy, atherosclerosis, and thrombosis are more frequent at Basel than at Kiel. Gastric and biliary disorders likewise present distinct regional differences." In study-

ing the pathologic differences between ulcers of the duodenum and of the stomach of German patients, as contrasted with those of American patients operated upon at The Mayo Clinic, my colleague, Snell, and I^{5,18,19} found that among German patients a very high percentage of various types of gastritis was associated with duodenal ulcer but that gastritis was observed but rarely among patients operated on at The Mayo Clinic. This observation was confined by Sebening^{17,21} of Frankfurt am Main. One of the reasons for the German surgeon's advocacy of resecting a portion of the stomach in addition to the portion of the duodenum containing the ulcer is to remove these areas of gastritis, but obviously this reason does not apply to patients on whom we were operating. The factor of gastric acidity, however, in cases of duodenal ulcer, is of paramount importance and, regardless of the method of treatment of duodenal ulcer, reduction of this gastric acidity and increase in the rapidity with which the stomach empties are objects to be sought.

Medically these objects are accomplished by rest, a liquid diet, and frequent feedings of milk, cream and alkalies. Surgically they are accomplished by removing the pyloric sphincteric mechanism and thus increasing the rapidity of emptying of the stomach. Whether the operation is pyloroplasty, gastro-duodenostomy, gastro-enterostomy, or gastric resection, partial or complete neutralization of gastric acids following such procedures is dependent, for the most part, on regurgitation of alkaline secretion from the intestine into the stomach. Reduction of hydrochloric acid to zero is not necessary to obtain an excellent clinical result nor does failure to obtain complete neutralization mean that the patient is likely to have a recurrent ulcer. Statistics on a large series of cases at The Mayo Clinic,² and at the clinics of Wilkie²² in Edinburgh, Moynihan¹⁵ in Leeds, and Gosset⁸ in Paris, show that when the operation is based on chronicity and failure of the patient to get well on adequate medical treatment, the incidence of gastrojejunal ulcer is not greater than 5 per cent if the gastro-enteric anastomosis continues to function well. In the clinics of many of the German surgeons, particularly those of Lorenz,¹³ Haberer,⁹ and Finsterer,⁷ who were the originators of the idea of routine resection of the stomach for duodenal ulcer, the percentage of recur-

ring ulcers reported in their series of cases in which gastro-enterostomy had been performed was approximately 10 per cent. I mention this to reemphasize the fact that recurrence of ulceration following a surgical procedure for duodenal ulcer, although intimately concerned with the presence or absence of hydrochloric acid in the gastric secretion, is likewise dependent on tissue resistance and other unknown factors.

Detailed studies have been made of gastric acidity before, and subsequent to, operation in 150 cases in which I operated for gastric or duodenal ulcer in the past year and a half at The Mayo Clinic.²⁰ The most marked reduction of gastric acidity occurred in cases in which the Polya type of gastric resection was performed, providing an entero-anastomosis which would have decreased the dilution of gastric acidity was not made between loops of jejunum. Next in order in producing reduction of gastric acidity were those cases in which the Billroth I type of gastric resection and anastomosis was performed, that is, following the resection, direct union was effected between the remainder of the stomach and the duodenum. Next followed posterior gastro-enterostomy, then pyloroplasty, and finally anterior gastro-enterostomy in which entero-anastomosis had been made. A few years ago¹⁶ it was the opinion of the advocates of routine gastric resection for duodenal ulcer that failure to obtain achlorhydria was attributable to the fact that an insufficient amount of stomach had been removed and that achlorhydria could be obtained in all cases in which two-thirds, or most, of the stomach had been removed. With greater experience these same observers found that, in spite of extensive gastric resection for duodenal ulcer, relative achlorhydria resulted in only about 50 per cent of the cases.¹² This point I wish to emphasize because, as will be shown, the risk of gastric resection for gastric and duodenal ulcer is several times greater than that of the conservative procedures of gastro-enterostomy and pyloroplasty.

The mortality of gastric resection has been reported as from 7 to 10 per cent if the duodenal ulcer is removed in the performance of gastric resection, and in some instances in which the duodenal ulcer is of large size and perforating, the mortality has been reported to exceed 10 per cent. It is to be borne in mind that a surgical proce-

dures of this magnitude is followed by relative achlorhydria in only 50 per cent of cases and that in forty-seven such cases reported from one American clinic, in which achlorhydria did not follow partial gastrectomy, recurring ulceration was noted in nine cases.³ Not only does relative achlorhydria occur with some degree of frequency following gastro-enterostomy, but also following gastroduodenostomy and pyloroplasty, the decrease in acidity which occurs sometimes equaling that which occurs in some cases following gastric resection. The mortality of gastro-enterostomy or pyloroplasty, in the hands of surgeons experienced in gastric surgery, should not exceed more than 1.5 to 2 per cent.^{1,11} It has been stated that to obtain relative achlorhydria, regardless of the surgical procedure used, is the most effective means of preventing development of recurring ulcer. Although this can be assumed to be true in most cases, there are exceptions, even when relative achlorhydria is obtained after gastric resection of the Billroth I type. I believe partial gastrectomy and duodenectomy have a definite place in certain cases of recurring duodenal ulcer, hemorrhagic duodenal ulcer, and cases in which multiple ulcerations of the stomach coexist with ulceration of the duodenum. Although the problem is still under investigation, I have the impression that following operations for recurring ulcer, if partial gastrectomy is performed, relative achlorhydria is likely to occur in practically all cases providing gastric dilution is not interfered with by entero-anastomosis. Assurance of a low operative risk in the treatment of most duodenal ulcers seems to me a point in favor of the conservative type of operation. A further argument in favor of gastro-enterostomy is that should ulceration recur at the anastomosis, or should the anastomosis not function properly, it can always be taken down and, in many such cases, unless obstruction has occurred in the gastro-enteric stoma, the old duodenal ulcer will be found to have healed completely. If in healing the duodenal ulcer has narrowed the lumen of the duodenum sufficiently to produce disturbances of motility and to interfere with emptying of the stomach, it is true that recurrent duodenal ulceration may be found. This, therefore, should be prevented by the performance of either a surgical procedure to increase the size of the outlet of the stomach or by gastric re-

section if the condition of the patient permits.

Having successfully accomplished partial gastrectomy and duodenectomy in the removal of a duodenal ulcer, it cannot be assumed in every case that complete relief of symptoms will always result. From many of the German clinics it is reported that approximately 80 per cent of patients are completely relieved of symptoms following partial gastrectomy. Failure to obtain relief in the additional 20 per cent of cases has been attributed, and proved on gastroscopic examination, to be the result of persistent gastritis in the remaining segment of the stomach.¹⁰ In several large groups of patients operated on at the clinic for duodenal ulcer, in which cases gastro-enterostomy was performed by Balfour, it was found that the results parallel those of gastric resection. Only cases in which a lapse of ten years had occurred subsequent to operation were included in the study.^{1,3} The possibility of development of anemia following extensive gastric resection, I think, always should be borne in mind. It is true that cases of this type are reported relatively uncommonly. On the other hand, the loss of a considerable amount of stomach and the effect of such a loss on digestion, blood formation, and physiology in general have not been thoroughly worked out.

Summary

In summary it may be said that in a case of peptic ulcer it should be determined whether the ulcer is in the stomach or the duodenum for ulcers in these two situations differ both biologically and pathologically. If a lesion is in the stomach, the possibility of malignancy should ever be kept in mind and hence removal of all persisting ulcerating gastric lesions is desirable. The effect of various surgical procedures in the treatment of gastric and duodenal ulcers is quite different. In general, removal of a benign gastric ulcer is rarely followed by recurrence of ulceration providing means are afforded for more rapid emptying of the stomach, and providing studies of gastric acidity reveal marked decrease of hydrochloric acid subsequent to operation. As for duodenal ulcer, recurring ulceration in all situations has occurred at The Mayo Clinic in less than 5 per cent of cases. Post-operative studies disclose reduction in acidity following gastro-enterostomy and fol-

lowing pyloroplasty. The greatest degree of reduction occurs following gastric resection. The results following any surgical procedure for duodenal ulcer depend on providing a method for more rapid emptying of the stomach as well as for neutralization of gastric acidity by the alkaline intestinal secretions. The mortality of gastro-enterostomy and of pyloroplasty in the hands of experienced surgeons is approximately from 1 to 1.5 per cent, whereas reports in the literature would indicate that partial gastrectomy in the hands of equally able surgeons reveals a mortality varying from 7 to 15 per cent, depending on the size and the degree of penetration of the ulcer and providing the ulcer is removed in the course of gastric resection. That the decrease in acidity following operations for duodenal ulcer is attributable, in part, to dilution of the gastric secretion by the intestinal secretion, is shown by the fact that when an anastomotic opening is made between the loop of jejunum, preventing in part the reflux of intestinal secretion into the stomach, gastric acidity undergoes but little change in many cases whether the operation is gastro-enterostomy or partial gastrectomy of the Polya type. Pathologically the lesions associated with duodenal ulcer differ greatly in different countries and among patients of different races. In Germany a marked degree of gastritis has been shown to occur in association with duodenal ulcer. In these cases the lesion usually is in an advanced state and is frequently complicated by obstruction which may explain the high degree of gastritis reported from the Central European Clinics. In similar fashion the incidence of gastritis has been emphasized by workers in one of the eastern clinics. Such gastritis has been found in relatively few patients operated on at The Mayo Clinic. It must be assumed, therefore, that in discussion of the choice of operation, the type of lesion and the reactions of the patients who are subjected to surgical procedures must be taken into consideration. Further, the conservative operations of gastro-enterostomy or gastroduodenostomy, performed in some parts of the United States and in some foreign countries, may be followed with results equally as good as those which follow gastric resection applied to patients of other races, living under different geographical conditions, who when subjected to conservative operations have given

greater evidence of recurring ulceration than might have been expected.

Bibliography

1. Balfour, D. C.: The management of lesions of the stomach and duodenum complicated by hemorrhage. *Jour. Am. Med. Assn.*, 89:1656-1660, (Nov. 12) 1927.
2. Balfour, D. C.: Results of gastro-enterostomy for ulcer of the duodenum and stomach. *Ann. Surg.*, 92:558-562, (October) 1930.
3. Berg, A. A.: A report of the end-results of subtotal gastrectomy for the radical cure of gastric and duodenal ulcer. *Tr. Am. Gastro-Enterol. Assn.*, (1933) 36:226-232, (October) 1934.
4. Berlin correspondent: The importance of geomedical knowledge. *Jour. Am. Med. Assn.*, 106:1106-1107, (March 28) 1936.
5. Church, G. T., Walters, Waltman, and Wellbrock, W. L. A.: Pyloric obstruction producing gastritis. *Proc. Staff Meet., Mayo Clinic*, 9:259-260, (May 2) 1934.
6. Dragstedt, L. R.: Some physiologic principles involved in the surgical treatment of gastric and duodenal ulcer. *Ann. Surg.*, 102:563-580, (October) 1935.
7. Finsterer, H.: Die chirurgische Behandlung des Magen- und Zwölffingerdarmgeschwürs und seiner Komplikationen. *Ergebn. d. ges. Med.*, 15:431-566, 1931.
8. Gosset: Personal communication to the author.
9. Haberer, H.: Quoted by Louria, H. W.: The surgical treatment of gastric and duodenal ulcer. *Surg., Gynec. and Obst.*, 47:493-502, (October) 1928.
10. Henning, Norbert: Die Gastritis des operierten Magens. *Mitt. a. d. Grenzgeb. d. Med. u. Chir.*, 42:401-408, 1931.
11. Judd, E. S., and Phillips, J. R.: Pyloroplasty: its place in the treatment of peptic ulcer. *Ann. Surg.*, 100:196-201, (July) 1934.
12. Klein, Eugene, Aschner, P. W., and Crohn, B. B.: The end-results of partial gastrectomy for primary gastric and duodenal ulcers: studies in pre- and post-operative gastric secretion. *Tr. Am. Gastro-Enterol. Assn.*, (1933) 36:197-205, 1934.
13. Lorenz, Hans, and Schur, Heinrich: Unsere Erfahrungen über den Wert der Antrumresektion bei der Behandlung des Ulcus pepticum. *Arch. f. klin. Chir.*, 119:239-276, 1922.
14. Mann, F. C., and Williamson, C. S.: Experimental production of peptic ulcer. *Ann. Surg.*, 77:409-422, (April) 1923.
15. Moynihan, B.: Lloyd Roberts lecture on some problems in gastric surgery. *Brit. Med. Jour.*, 2:1020-1026, (Dec. 8) 1928.
16. Reid, J. S.: The acidity and motility of the stomach before and after operations for peptic ulcer. Unpublished thesis, 1926.
17. Sebening, Walter: Why partial gastric resection is preferred for peptic ulcer in Germany. *Proc. Staff Meet., Mayo Clinic*, 7:139-142, (Mar. 9) 1932.
18. Walters, Waltman: Recent developments in the treatment of gastric lesions. *Surg., Gynec. and Obst.*, 55:355-359, (September) 1932.
19. Walters, Waltman: The choice of surgical procedures for duodenal ulcer. *Ann. Surg.*, 96:258-268, (August) 1932.
20. Walters, Waltman: Gastric acidity following operations for gastric and duodenal ulcer. *Jour. Am. Med. Assn.*, 106:413-414, (Feb. 1) 1936.
21. Walters, Waltman, and Sebening, Walter: A comparison of the lesions associated with duodenal ulcer in Germany and in the United States. *Minnesota Med.*, 15:579-584, (September) 1932.
22. Wilkie, D. P. D.: Jejunal ulcer: some observations on its complications and their treatment. *Ann. Surg.*, 99:401-409, (March) 1934.

TETANY OF THE NEW-BORN

MYRON D. JACOBY, M.D.†

DETROIT, MICHIGAN

Up until 1931, it was very doubtful whether such a condition as tetany of the new-born existed. Textbooks failed to mention this condition as being present before the sixth week of life. Grulee² doubts the presence and von Reuss¹¹ does not believe that tetany can occur in the neonatal period. But since 1931, numerous cases have been reported describing this condition, especially by Nesbit,⁸ Shannon,¹⁰ and Kehrer.⁵

In most respects tetany occurring in other periods of life closely resembles the syndrome present in the neonatal period. This condition occurs independently of the obstetric procedure and is responsible for the cerebral manifestations. It seems that there is an edema of the brain in addition to a tendency to generalized edema and the edema of the brain is responsible for many of the symptoms usually attributed to cerebral hemorrhage and other injuries to the brain. In one case at autopsy, Shannon¹⁰ found marked edema of the brain with no evidence of hemorrhage.

The symptoms consist of extreme nervous irritability; hypertonia; convulsions, tonic and clonic; crow; edema, usually slight, over the tibia; exaggerated reflexes; and a positive Chvostek sign.

There is a marked increased sensitivity

to all sensory impressions, such as sudden noise, jarring, light. All the stimuli give rise to exaggerated responses in the form of sudden movements which vary from a forced stretching action to definite localized or generalized spasms of the general musculature. These motions are apparently painful as they are accompanied by screaming. The hypertonia presents itself as a general tenseness or spasticity of the entire musculature. The most important spasms are those of the hands and feet. The hands may be held in typical obstetric position, the fists being tightly clenched or the fingers rigidly extended and spread. The feet may be held in rigid flexion or extreme extension. Spasm of the facial muscles may be shown in a constant grimacing or in a pouting position of the lips. Spasm of the

†Dr. Jacoby is a graduate of the Medical College of Syracuse University, class of 1923. He received his general internship at the City Hospital, New York; he was a resident on the pediatric service of Bellevue Hospital, New York, and resident on the contagious department of Herman Kiefer Hospital, Detroit. He is now connected with the pediatric service of Grace Hospital, Detroit.

extra-ocular muscles may give rise to various movements of the eyeballs, both co-ordinated and inco-ordinated. Spasms of the larynx give rise to the typical crow. Spasms may be present in various parts of the intestines, giving rise to symptoms resembling pyloro-spasm or symptoms of colic. The duration and extent of the spasms vary from slight to the most extreme. They may be precipitated by sudden disturbances of any kind. The Chvostek sign may be present, although this sign has been considered insignificant in the new-born period.⁷ The Trousseau phenomenon is difficult to elicit since usually the mere touching of the infant brings about this response.

The subcutaneous edema usually presents itself as a slight puffiness and pitting on the dorsa of the hands and feet, and scrotum in boys. The edema may be quite pronounced over the entire body. The edema may be observed by sudden jumping in weight without any demonstrable clinical edema.¹

The cerebral symptoms are the most important because they are the most grave of all the symptoms of the syndrome. They show evidence of cerebral pressure, such as slowness of the pulse when infant is perfectly quiet, cyanotic attacks, suspension of respirations for varying lengths of time, and typical generalized convulsions. These convulsions may be present without loss of consciousness, as shown by the constant screaming from the painful spasms. Projectile vomiting may be a feature. Increased intracranial pressure may be shown by tenseness of the fontanel.

Shannon¹⁰ feels that vomiting and irregularity of the intestinal motility may occur, although they have never been sufficiently striking to be convincing to him. In my own experience, cases resembling pyloro-spasm and colic in infants have been relieved by the same therapeutic procedures as given in tetany of the new-born and I feel that these types of cases should be incorporated in the subject under discussion.

In the differential diagnosis, cerebral hemorrhage, congenital heart lesions, enlarged thymus, atelectasis, and congenital deformity of the larynx and contiguous parts must be ruled out.

The blood calcium studies in the cases reported are very misleading. Howland and Marriott³ describe the normal level of

calcium as lying between 9 and 11 mg. per 100 c.c. It is a common belief that only when serum calcium is reduced to about 7 mg. per 100 c.c. will typical spells of tetany appear.⁸ More recent studies of Jones⁴ reveal that the plasma-calcium in 22 infants from four hours to twelve days old averaged 12.3 mg. Nohlen⁹ found 12.6 mg. in new-born infants. From this it appears that serum calcium during the neonatal period is higher than in childhood or adult life. It is easy to conceive then that a serum calcium of 10 or 11 mg. in a new-born infant can be considered as being below the normal level. It is likely, however, that the factor that determines the development of tetanic manifestations in new-born infants probably is not the level of the serum calcium but rather the amount of diffusible calcium available. Liu⁶ found that this portion may be low even in the cases of relatively high total serum calcium. He also demonstrated that parathyroid extract and other measures employed in controlling tetany produced an increase in diffusible calcium that was out of proportion to the total rise.

Shannon¹⁰ explains that the lowered ionic calcium is directly due to alkalosis and not to any diminished function of the parathyroid glands.

The treatment is fairly simple. Calcium is the specific for this disease complex. It is most effective when injected intravenously, but due to the difficulty of intravenous procedures in the new-born infants, the somewhat less effective method of injection of a 10 per cent solution of calcium gluconate intramuscularly is used. As much as 10 c.c. can be given repeatedly without bad local effects. Calcium gluconate by mouth in powdered form up to 60 gr. a day is used after the acute symptoms are relieved. Some form of vitamin D should be given as soon as possible to increase the utilization of the calcium given by mouth. Cod liver oil, viosterol, either alone or with halibut oil, is given, though its immediate value may be questioned. Parathyroid extract-Collip is invaluable. While its effects are less prompt than those following injection of calcium, they are sure and sustained, especially in raising the ionized portion of blood calcium. From 0.3 c.c. to 1.5 c.c. is the usual dose. The removal of spinal fluid is indicated to relieve intracranial pressure.

Conclusions

There occurs not infrequently in the new-born infant a syndrome typical of tetany in childhood and adult life. This syndrome occurs as a result of some interference with calcium metabolism resulting in lowered ionic calcium content of the blood and tissues.

Case Histories

Case 1.—Baby T., born January 15, 1935, following easy labor, was normal at birth, weighing 7 lb. 5 oz. Father and mother are living and well, and there are two other children. For the first six days, the infant seemed to be getting along very well, taking breast and complementary feeding, which it retained. On the sixth day, it developed a series of convulsions, some of them being generalized and some localized; sometimes involving one side, sometimes the other. These convulsions lasted for two days. On the seventh day (that is, one day after convulsions started) diarrhea set in, which lasted for twelve days. Infant was having from ten to twelve bowel movements per day—loose, green; but no mucus and no blood. Paregoric and milk of bismuth was given continuously but apparently with no benefit. The diarrhea suddenly stopped and the infant was sent home. Two days afterward, convulsions set in again, coming on about every hour. The character of these convulsions was the same as previously noted. I saw the baby for the first time in consultation on the following day, and he presented the following picture: A tall, thin baby, weighing 7 lb. 2 oz. (three ounces less than birth weight) with generalized hypertonia. Extremities were quite spastic, as shown by passive resistance to manipulations. Infant cried almost continuously. A slight jarring or sudden noise seemed to provoke a spasm. The Chvostek sign was present. Trousseau's phenomenon could not be elicited because of the spastic condition. A dermatographia and increased knee jerks were present. The spinal tap revealed a normal fluid under increased pressure with normal cell count, and nothing abnormal chemically. Blood calcium was not taken.

Infant was given 10 c.c. of a 10 per cent solution of calcium gluconate and parathyroid extract-Collip, $\frac{1}{2}$ c.c. intramuscularly. The convulsions ceased immediately and the hypertonia disappeared in about one week. Infant was placed on evaporated milk formula and four days after my initial consultation put on haliver oil and viosterol, 20 mm. once a day. Ten days after my initial visit, calcium gluconate, 40 gr. by mouth daily, was instituted. The infant took its formula well, started gaining in weight almost immediately and on February 24, thirteen days after first seen, weighed 8 lbs. 4 oz., making a gain of 1 lb. 2 oz. in two weeks. The calcium by mouth was discontinued after two weeks and nothing abnormal set in. Infant developed normally and I last saw him at the age of six months. At this time he was 27 inches long, weighed 16 lbs. 4 oz., was taking food well, and, to all intents and purposes, was a normal infant of that age.

The exceedingly interesting point about this case is that convulsions stopped when an acidotic condition set in, due to the diarrhea, and when the diarrhea cleared up, the tetanic manifestations became evident again. This manifestation apparently cleared up rapidly once suitable medication was started.

Case 2.—Baby H. was delivered at home on April 15, 1935, and was apparently normal at birth, fol-

lowing an easy delivery. This was the first baby; father was well, but mother was nervous during pregnancy and seemed to show some evidence of insufficient calcium, although cod liver oil was given during the latter months of pregnancy. On the third day after delivery, generalized convulsions with cyanosis set in. These came on an average of every hour. I was called in about twelve hours after onset of symptoms and infant presented the following picture: An apparently well formed new-born with generalized hypertonia as evidenced by resistance to passive motion. A positive Chvostek, increased but equal knee jerks, no bulging of the fontanel, positive dermatographia, a slight edema of the dorsæ of the feet. The rest of the examination was negative.

A spinal puncture was done immediately and showed no evidence of intracranial bleeding. No blood calcium was taken. Infant was started on calcium gluconate, 10 c.c. of 10 per cent solution and 0.5 c.c. parathyroid extract-Collip intramuscularly. For a period of three months, the tetanic manifestations would return if the medication was stopped for varying periods of time. But eventually, when the infant was five months old, the condition cleared up entirely.

The main point of interest in this case was that medication had to be supplied for such an unusual length of time. With the suggestive family history and with the exceedingly long duration of symptoms, I feel that this was a true case of parathyroid deficiency.

Case 3.—Baby E., aged fifteen days, was seen on January 10, 1935. Family history was unimportant. Labor was normal. The birth weight was 7 lbs. 9 oz. The infant was seen by me in consultation because it had fretted and vomited since birth. Although mother had an abundance of milk, baby's weight had fallen to 6 lbs. 14 oz. Following nursing, projectile vomiting had occurred. Stools were normal. Infant was hypertonic and fretted almost continuously. Sudden jarring easily elicited some spasm of the extremities. Chvostek sign was not elicited. Infant had been on atropine sulphate solution, one drop of 1-1000 solution before each nursing, which had been increased to three drops, but apparently without any benefit.

I gave the child calcium gluconate and parathyroid extract-Collip intramuscularly and I stopped the atropine sulphate to make a therapeutic diagnosis. The fretfulness and vomiting decreased considerably, and the condition cleared up entirely with ten days of treatment.

Apparently the tetanic manifestations were a result of the lowered ionic calcium due to vomiting. The cause of the vomiting I do not know, although the evidence seems to indicate it was due to a pylorospasm of tetanic origin and that a vicious circle had set in. Inasmuch as the symptoms cleared up quite rapidly, I am under the impression that the giving of calcium may be an additional and more valuable adjunct in treating pylorospasm than the older method of atropine, thick cereal feeding, etc.

Case 4.—Baby M. was seen by me on September 14, 1935, eight days after the birth of a normal infant with a history of an intermittent crow ever since birth. Family history was unimportant. Labor was normal. Examination revealed a tall, thin, somewhat hypertonic infant, weighing 6 lbs. 15 oz. Examination, except for above revealed nothing pathological. Before advising x-ray of the thymus and before bronchoscopic consultation, I thought it advisable to try calcium gluconate and parathyroid extract-Collip on the supposition that this was a mild case of tetany of the new-born, showing only laryngospasm. One injection was given and crow cleared up immediately and apparently infant is getting along very well.

Bibliography

1. Feer, Emil: *Diagnosis of Children's Diseases*. Translated by C. A. Scherer. Philadelphia: J. B. Lippincott Co., 1928, p. 58.
2. Grulee, C. G.: *Clinical Pediatrics*. New York: D. Appleton and Co., 1926, vol. 3, p. 246.
3. Howland, J., and Marriott, W. McK.: Calcium content of blood in infantile tetany. *Quart. Jour. Med.*, 11:289, (July) 1918.
4. Jones, M. R.: The calcium content of blood plasma and corpuscles in the new-born. *Jour. Biol. Chem.*, 49:187, (November) 1921.
5. Kehrer, E.: Die Geburtshilflich-gynäkologische Bedeutung der Tetanie. *Arch. f. Gynäk.*, 99:372, 1913.
6. Liu, S. H.: Chronic juvenile tetany; comparative study of the effects of various treatments on the calcium and phosphorus metabolism in tetany. *Jour. Clin. Investigation*, 5:259, (February) 1928; Partition of serum calcium into diffusible and non-diffusible portions. *Chinese Jour. Physiol.*, 1:331, (July) 1927.
7. Mitchel, A. G., and Stevenson, F. E.: Chvostek's facialis sign in newborn infants. *Jour. A. M. A.*, 99:1502, (Oct. 29) 1932.
8. Nesbit, H. T.: A syndrome occurring in the neonatal period manifesting tetany-like symptoms. *Am. Jour. Dis. Child.*, 44:287, (August) 1932.
9. Nohlen, A.: Blood calcium in the mother and new-born. *Ztschr. f. Kinderh.*, 42:60, 1926.
10. Shannon, W. R.: Cerebral injury in the newborn: Its relation to constitution and the tetany syndrome. *Am. Jour. Dis. Child.*, 48:517, (September) 1934.
11. von Reuss, A. R.: *Diseases of the Newborn*. New York: Wm. Wood and Co., 1922, p. 343.

THE UNIVERSITY AND THE STATE*

JAMES D. BRUCE, M.D.†

ANN ARBOR, MICHIGAN

Of the many difficult problems incident to the depression, welfare, particularly in relation to the care of the sick, has been one of the most trying. Even after six years much diversity of opinion as to the most feasible plans for its solution still exists. Meanwhile, the medical profession has been carrying a tremendous burden. No group in society has continued to function throughout this period so faithfully to its trust. However, as none but emergency cases of illness are now being cared for in the welfare groups, the early detection and treatment of disease—one of the most important objectives of modern medicine—loses much effectiveness.

The care of the sick is not a humanitarian responsibility alone. Any deviation from the normal, whether it be in acute or chronic illness, physical or mental defects, not only influences the happiness and the success of the individual and of his family, but its ramifications are found throughout all society. Problems relating to health then are very definitely matters of community concern.

We have heard much the past few years of the "more abundant life." As we observe the progress toward this objective, it becomes increasingly clear that we have been indulging in a great deal of wishful and probably unsound thinking. So far as history records, natural laws have not been turned about by a happy phrase, nor even by an alluring political promise. Nature continues to take her toll and give her reward without fear or favor, so that if a life of greater abundance is to come to us and to our children, we, ourselves, are going to be largely responsible for it. The most that any agency, be it government or private

source, may do is to afford opportunity. Humanity's fundamental problems have not changed greatly since man first walked upon the earth, and probably the first effective answer to these problems was formulated when, 2,500 years ago, the Old Greeks set as an objective soundness of mind and of body, thus adding to their ability to adjust themselves more satisfactorily to both the thoughts and actions of others. The capacity to make this adjustment requires knowledge and physical fitness in increasing degree as the problems of national, community and private life increase, as they are increasing, in complexity. A primary objective, then, would seem to be provision for both education and health.

The support of widespread education is fundamental to our democratic form of government. The Founding Fathers recognized in the earliest days of the Republic that if we were to have a government by the people it was necessary that the people be informed. More than this, certain fundamental traits of character were thought to be essential, and these, it was believed, could be nourished and developed by education. On July 13, 1787, Congress passed perhaps the most important piece of fundamental legislation that was ever made for or by the American people. It was an ordinance for

*Presented at the dedication of the Central Michigan Children's Clinic, Traverse City, June 24, 1936.

†Dr. Bruce is vice president of the University of Michigan and director of the department of post-graduate medicine.

the government of the Northwest Territory, a territory which included what is now Ohio, Indiana, Illinois, Wisconsin and Michigan. This has come to be known as the Ordinance of '87. Its provisions were briefly as follows: It prohibited slavery; it provided for religious freedom; it contained a bill for civil rights; and it included above all else "religion, morality, and knowledge being necessary to good government and the happiness of mankind, schools and the means of education shall forever be encouraged." In this early plan to encourage education, the University was visualized as the keystone of the educational arch.

The first constitutions of Pennsylvania, North Carolina and Vermont provided for universities. Any of these beginnings might have developed into a typical state university, but the honor of being the "mother of state universities" was reserved for Michigan. While still a territory the Governor and Judges of the Territory of Michigan, on August 26, 1817, passed an act establishing the University of Michigan. Five years later, on April 30, 1821, this act was repealed, locating the University in Detroit, but on January 26, 1837, after Michigan had been admitted to the Union as a state, one of the first acts of the legislature was to annul the former acts, completely re-organizing the entire school system of the state and establishing the University where it now stands at Ann Arbor.

It is interesting to trace the development of our ideas as to the function of a university. According to Old World ideals, a university is a seat of learning and culture, a place where the frontiers of human knowledge are enlarged and enriched. According to the ideals of our early leaders, such as Washington and Jefferson, a university is primarily for the training of leadership in the arts, sciences and, especially, in government. They realized that government by the people could survive only when there was a high level of intelligence of the people as a whole and a high type of leadership, both being necessary in a government such as ours. Both believed in the university as the keystone of the educational arch. Washington, however, favored a national university while Jefferson, with wider vision of America's future, advocated a university as the crowning achievement of the educational system of each state.

According to our modern democratic

ideals as applying to a state educational system where "schools and the means of education shall forever be encouraged," the function of a university should include not only learning, culture and research, but also the idea of service to the commonwealth as a whole. This concept of university function accounts for the ready acceptance of the request from the Michigan State Medical Society that the University join with it in a plan for the continuing education of physicians.

Eight years ago, the Board of Regents authorized the establishment of a Department of Postgraduate Education in the Medical School of the University of Michigan. Under the direction of this Department and in collaboration with the State Medical Society, a teaching program designed to meet the needs of the practising profession was begun in Ann Arbor and Detroit. Two years ago this program was extended into other centers of the State—in Battle Creek and Kalamazoo, jointly, Grand Rapids and Flint. Last year centers were established in Bay City and in Traverse City-Cadillac-Manistee, jointly, to serve more conveniently the profession of the northern portion of the lower peninsula of the State. A similar program will be instituted in October of this year in a central part of the upper peninsula, probably Marquette, Houghton, or Escanaba, or all three.

This statewide program should, if the profession avails itself of it, make possible an acceptable quality of medical service in every town and village of the State. It is true that all medical treatment may not be carried out to best advantage in distinct areas of the State. Many disorders must still be dealt with by doctors who have had special training and in surroundings with unusual equipment. While this continuous program of postgraduate training permits a larger number of doctors to care for a wider variety of disorders, the diagnosis of more obscure manifestations of disease and the direction of their treatment must be in specialized hands which have access to more complete equipment.

There was a time when medical knowledge was relatively static, when scientific progress was so slow that the well-trained graduate could practice effectively with but an infrequent visit to a teaching center. Those days have long since passed and

scarcely a year goes by without some advancement in medical science.

It was to help in the continuing education of doctors and for the purpose of raising the quality of medical care, as well as to be of direct service to underprivileged children that the University entered into a partnership with the Children's Fund of Michigan in a clinical teaching center for the diseases of children at Marquette five years ago. The high regard in which the services at the clinic are held by both the medical profession and the public has influenced the University administration and the medical profession in the establishment of a similar service at Traverse City. As in the case of the Marquette clinic, this service is not designed to replace the services of the doctors in this area. It proposes to supplement the activities already existing by making available a practitioner trained in the diseases of children and all the modern equipment necessary for a complete medical service in this field.

Twenty years ago, a spokesman of the medical profession of America stated in substance that it was the duty of the medical profession to strive for an adequate service to all of our people, both rich and poor, at a price within their means to pay. The medical profession of this state has dedicated itself to this principle.

Besides providing for better medical service, the medical profession and the University are sponsoring another program under the designation of the Joint Committee on Health Education, whose purpose it is to make available information on health and to foster and promote wholesome health habits among our citizens.

"The function of the Joint Committee is to present to the public the fundamental facts of modern scientific medicine for the purpose of building up sound public opinion relative to questions of public and private health. It is concerned in bringing the truth to the people, not in supporting or attacking any school, sect, or theory of medical practice. It will send out teachers, not advocates."

It was apparent from the beginning that there were many agencies other than the medical profession necessary in a complete program of health teaching, and the professions of dentistry, nursing, public health, and all of the various health agencies of the

State, both professional and lay, have joined in the program. High school and public lectures on health have been given throughout the State in recent years through the Joint Committee on Health Education under the direction of the Extension Division of the University. With the generous financial support of the W. K. Kellogg Foundation, the Children's Fund of Michigan—responsible for the Children's Clinic which we are dedicating today—and contributions from the various agencies which constitute the Committee, there is now nearing completion, with the approval and assistance of the State Department of Public Instruction, a program of health education which will very shortly be incorporated as an integral part of the curriculum of the school system of the State. This matter is mentioned at this time as an indication of the importance in which the health of the child is held by those interested in his education as well as those concerned with his medical care.

There are, then, two interlocking programs in the health interests of the State: the first providing for an adequate, up-to-date medical service; the second providing for the dissemination of useful knowledge directed toward the formation of sound health habits, this program to begin in childhood, both in the home and in the school, and to continue throughout the life of the individual.

A university may be said to have three definite functions: to meet on its campus the educational needs of its students; to enlarge the boundaries of knowledge, and to further by advice, direction and influence the interests of its citizens. The university's immediate function, of course, is education. However, our own studies and innumerable others show a definite relationship between physical fitness and scholarship; that on the average the boy and girl with good physiques and free from illness make the better scholars and, everything else being equal, the better citizens. What worthier obligation may a state-supported university assume than to qualify for useful, independent citizenship through the promotion of health, scholarship and the advancement of knowledge?

UNUSUAL OVARIAN TUMOR

L. E. HAMLIN, M.D., F.A.C.S.†

Surgeon-in-charge, Penn Hospital

NORWAY, MICHIGAN

Huge ovarian tumors are by no means uncommon in medical history but owing to modern surgery they are becoming increasingly rare. The case here recorded presents some unusual aspects and these, I believe, will be of sufficient interest to warrant its publication.

Motley⁷ reports a review of the literature by J. G. Ward in 1922 showing five cases of ovarian cyst weighing more than 225 pounds viz; Brinkley 225 pounds, Tuffier 235 pounds, Bartlett 245 pounds, Barlower 298 pounds and Spohn 328 pounds (estimated weight). There were four cases of more than 200 pounds, twenty-nine weighing more than 150 pounds and seventy-eight, more than 100 pounds. Ward¹¹ reported a case himself at this time of an ovarian cyst weighing 221 pounds in which the patient died one hour after the removal of the tumor. In Motley's case the tumor weighed 107.5 pounds. His patient, a woman of fifty-one years, made a good recovery. Lloyd, Showalter and Davis⁶ successfully drained and removed a cyst weighing 175 pounds from a woman forty-seven years old. Gibson³ reported removal of a pseudomucinous cystadenoma containing 18 gallons of fluid, the patient making a good recovery. Robinson and Gröve-White⁸ removed a dermoid ovarian tumor weighing 25 pounds.

A considerable number of cases of large ovarian cysts in juveniles has been recorded. According to Secor⁹ up to 1905, sixty-one ovarian cysts in children had been noted. Since that time thirty-eight more have been added. In 1893 Keen⁵ removed an ovarian tumor weighing 111 pounds from a fifteen year old girl. The child recovered. Findley,¹ in 1921, reported a case of ovarian cyst weighing 32 pounds in a girl of thirteen years. In 1895, Walter¹⁰ described a case of multilocular cyst weighing 13 pounds 10 ounces in a thirteen year old girl. Furber² removed a pseudomucinous cyst weighing 21.2 pounds from a fifteen year old girl with a good recovery. Greenhill⁴ reported a cystic fibroid weighing 47 pounds in a colored woman of forty-eight years who died before operation. The tumor simulated an ovarian cyst and there were many points of similarity between his case and the one reported here.

†Dr. L. E. Hamlin is a graduate of University of Toronto, 1922. He was assistant in Surgery, Henry Ford Hospital, Detroit, Michigan, 1923-1925; Surgeon, Ford Motor Company, Iron Mountain, Michigan, 1925-1929; Surgeon, Penn Iron Mining Company, Norway, Michigan, 1929-1934. He is a fellow of the American College of Surgeons (1931) and Medical Director Penn Iron Mining Company Hospital, Norway, Michigan.

Report of Case

Mrs. E. M., aged thirty-five, was first seen five years ago complaining of a sore throat. A very noticeable swelling in the abdomen, about the size of a full term pregnancy, was noted at this examination. On further interrogation she emphatically stated that she was not pregnant and had just finished her regular menstrual period. Examination revealed a tumor of considerable size which appeared to be confined to the left side. An ovarian cyst was suspected and the patient was advised to have it operated upon. This she refused to do, stating that she was afraid of an operation. In April, 1935, she again reported for examination and wished to have the tumor removed. She now recalled that she had first noticed the swelling in her abdomen seven years ago and had consulted a physician at that time, but conceiving the idea that nothing could be done for her, had allowed the condition to progress. The family history was negative. Her parents were dead and she had four sisters alive and well. She had one child, now a boy of sixteen, but no other pregnancies. The only previous illness she could remember was scarlet fever during childhood.

Aside from the enormous enlargement of the abdomen she complained of spells of gastric distress particularly after a big meal, constipation and inability to move about. She suffered no abdominal pain, there were no urinary symptoms and she menstruated regularly, the flow lasting eight to ten days. She had considerable backache at her periods. The swelling in the abdomen had been increasing more rapidly of late, she was becoming short of breath and found it next to impossible to do her housework. She had finally realized that something must be done and determined to have it taken care of.

Examination revealed a well developed, well nourished white woman of thirty-five years. Her weight was 198 pounds, temperature 98.4, pulse 102 per minute and respirations 20. The eyes reacted to light and accommodation. Teeth were in bad condition. There was a slight fullness of the thyroid gland. Systolic blood pressure was 110 and diastolic 80. The chest showed no pathologic change. The abdomen was enormously distended, the skin tense and showed many striae. The contour was quite smooth. The lower portion was becoming definitely pendulous. The ribs were flared outwards owing to upward pressure from the tumor, and there was a tortuous varicosity along the anterior aspect of the left thigh. On percussion there was definite evidence of fluid though a wave was difficult to elicit. In the lower left quadrant the tumor was very firm and was definitely solid rather than cystic. There was no tenderness anywhere in the abdomen. Pelvic examination was unsatisfactory as nothing could be felt except the huge mass.

Laboratory findings were as follows: Kahn precipitation test negative; urine, specific gravity 1023, color amber, slight turbidity, acid reaction, slight trace of albumin, sugar negative. Microscopically there was an occasional hyaline cast and 18 to 20 pus cells per low power field.

the fluid gradually. Following this procedure she experienced considerable relief and the abdomen decreased in size so that a solid mass could be definitely palpated in the lower left quadrant. After several days in bed only two quarts of fluid were obtained, so the catheter was removed. The wound

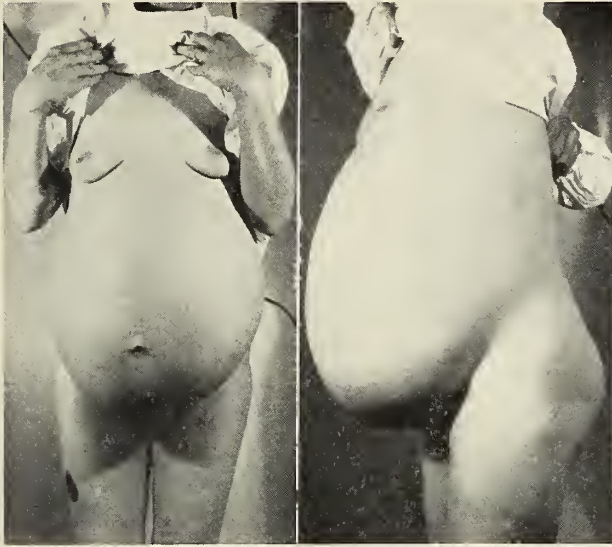


Fig. 1. Patient before operation.



Fig. 2. Patient after operation.

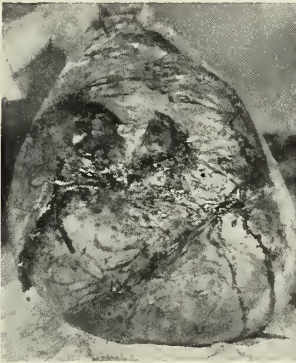


Fig. 3 (left). Anterior view of tumor.



Fig. 4 (right). Solid portion of tumor showing cyst wall attached.

White cell count 9,000; red cells 3,900,000; hemoglobin 75 per cent; differential count, polymorphonuclears 67, large lymphocytes 9, small lymphocytes 16, monocytes 4, transitional cells 4.

A radiograph of the abdomen showed only a general haziness.

On April 10, 1935, under local infiltration with novocain 1 per cent, an incision was made to the right of the umbilicus and a small area of the wall of the tumor exposed. The mass was quite adherent to the parietal peritoneum. Ten cubic centimeters of straw colored fluid was aspirated, following which a Kelly clamp was pushed through the cyst wall and about four quarts drained off. Pressure on the abdomen was necessary to force out any considerable quantity of fluid. A number sixteen French catheter was introduced through the wall of the tumor and fastened in place by means of a purse string suture. The patient was returned to bed as it was planned to remove the remainder of

closed quickly and the patient was allowed to return home.

On May 17, 1935, she was again admitted to hospital. The tumor was now its original size. Under ether anesthesia a midline incision approximately fourteen inches long was carried down to the peritoneum and the abdominal cavity opened. The abdominal wall was very thin and the tumor immediately presented itself. It was quite adherent to the peritoneum but stripped readily from it. During this process the cystic portion ruptured allowing a large amount of fluid to gush out, approximately four gallons being caught. The mass was then delivered through the incision, the pedicle clamped and incised and the tumor removed. It had originated from the left ovary. The uterus was quite flattened out, and the intestines appeared flat and ribbon-like. The whole abdominal cavity was widely exposed by the removal of the mass and all the organs could be very distinctly observed. No other pathology was

found and the right ovary was normal. The incision was closed in the routine way after inserting one cigarette drain. The contour of the abdomen was now markedly scaphoid and the flaring of the lower ribs accentuated. Large dressing pads were used and adhesive strapping applied. The patient stood the operation very well and left the operating room in good condition.

The tumor was found to consist of two portions, a large greyish white, solid mass and a much thickened cyst wall. There were many tortuous vessels over its surface and the cystic portion contained large clumps of greyish fibrinous-looking material and coagulum. Microscopic examination of the fluid showed considerable mucoid debris with an occasional pus cell. No bacteria were found. The tumor, minus the fluid, weighed 28 pounds. The fluid collected weighed 36 pounds, making a total of 64 pounds. Taking into consideration the amount of fluid lost at operation the combined weight must have been in the neighborhood of 70 pounds. The patient showed no signs of shock at any time and made an uneventful recovery. On June 22, 1935, her weight was 130.2 pounds.

Bibliography

1. Findley: Partial rupture of an ovarian cyst weighing thirty-two pounds with great loss of blood in a girl fifteen years of age. *Jour. Obstet. and Gynec. British Empire*, 28:151, 1921.
2. Furber, R. I.: Ovarian cyst in a girl aged fifteen years. *Med. Jour. of Australia*, p. 683, (Nov. 12) 1927.
3. Gibson, Gordon: Large ovarian cyst. *Amer. Jour. Obstet. and Gynec.*, 26:264-267, (August) 1933.
4. Greenhill, J. P.: Cystic fibroid weighing forty-seven pounds and simulating an ovarian cyst. *Amer. Jour. Obstet. and Gynec.*, 25:440, (March) 1933.
5. Keen, W. W.: An ovarian tumor weighing one hundred and eleven pounds removed from a child of fifteen whose weight was sixty-eight pounds. *Coll. and Clin. Record*, 14:142, 1893; *Medical Review*, 28:3, 1893.
6. Lloyd, Showalter and Davis: Ovarian cyst. Report of an unusual case with recovery following operation. *Jour. Amer. Med. Assn.*, 103:559, 560, (Aug. 25) 1934.
7. Motley, J. C.: Ovarian cyst with report of an unusual case. *Virginia Med. Month.*, pp. 767-768, (February) 1924.
8. Robinson, J. B., and Grove-White, J. H.: Torsion of a Large Dermoid Ovarian Tumor, 1925.
9. Secor, W. L.: Multilocular tubo-ovarian cysts in juveniles. *Jour. Amer. Med. Assn.*, 87:940, (Sept. 18) 1926.
10. Walter, W.: A case of leakage of multilocular cyst in a girl thirteen years of age. *Brit. Gyn. Jour.*, 11:51, 1895-1896.
11. Ward: Surg., Gynec. and Obstet., (January) 1922.

THE RELATIVE VALUES OF THE SYMPTOMS OF APPENDICITIS

C. R. DAVIS, A.B., M.D., F.A.C.S.†
DETROIT, MICHIGAN

As simple and well known as the symptoms and signs of appendicitis are, their relative values are not so well known, for which reason I shall discuss these values as shown in an analysis of a series of 951 cases.

The typical symptoms and signs of appendicitis are epigastric pain, nausea, vomiting; pain, tenderness, and rigidity in the right lower quadrant; fever, and leukocytosis. When all of these symptoms and signs are present, the diagnosis of appendicitis is agreeably easy, but frequently some of them are absent, and at times it is so difficult to obtain a clear cut history that the best of diagnosticians are doubtful about the diagnosis.

The least dependable symptoms and signs might be called accessory and are fever, leukocytosis, and rigidity, dependence upon any or all of which may cause errors in diagnosis. Although they are very helpful when present, their absence should not delay operation if the more dependable symptoms and signs are present. Other accessory symptoms such as chills and diarrhea occur, and then there is the history of repeated attacks which is very important even though not a symptom. Although nausea and vomiting are accessory symptoms, they assume great importance when classified with the mid-abdominal group of symptoms which I shall discuss later.

Fever accompanies so many disease conditions that it alone is of little help. It is so often absent in appendicitis, even in patients with advanced appendicitis, that I never permit its absence to influence me to postpone operation. It may rise in all cases at some time and then drop, but if we do not see the patient during the time the fever is present, we frequently have no way of knowing that fever has existed. I have often said and still say that we should never wait for a rise in temperature when the temperature is normal because by the time a rise in temperature occurs we frequently are too late, not to save a life, but to have a clean case.

In 144 of the acute cases of the series of 951 cases the following temperatures impressed me sufficiently to mention them in my notes:

†Dr. C. R. Davis graduated from Cornell University Medical College, New York City, in 1908 with an M.D. degree. He served as Interne and House Surgeon at the Presbyterian Hospital in New York City in 1909 and 1910. He is Attending Surgeon and Advisory Consultant of the Out-Patient Department, The Grace Hospital.

Temperature	No. Cases
98.6	25
99	25
100	24
101	22
102	27
103	9
104	8
105	3
107	1

Thirty-four and seventy-two hundredths per cent of the temperatures were almost normal and 17.36 per cent were normal.

Similarly, leukocytoses, although a well-known sign in appendicitis, should be disregarded when not consistent with the more reliable symptoms. In 440 cases in which I recorded leukocyte counts, the figures were:

Normal	21
Below 10,000.....	111
10,000 to 15,000.....	154
15,000 to 20,000.....	102
20,000 to 25,000.....	45
25,000 to 30,000.....	7

Thirty per cent of the leukocyte counts were below 10,000.

Chills occurred seven times in 951 cases, diarrhea twenty-one times and may have been an etiological factor, and repeated attacks, 296 times, a rather helpful history.

Rigidity is considered by many as very important. In the 951 cases rigidity could be recognized as follows:

234 times in the right lower quadrant
72 times general
24 times elsewhere
20 times absent (at least I could not recognize rigidity)
601 times too uncertain for comment

Thirty-four and seventy hundredths per cent showed rigidity which could be recognized easily with certainty.

When we consider how much practice is required to obtain the touch necessary to recognize slight degrees of rigidity and that the average physician will see only ten or twelve cases of appendicitis a year, and when it can be recognized easily in a third of the cases only, it cannot be considered reliable, even though we must admit that it is important. The symptoms which I have discussed so far I consider undependable symptoms, because they occurred in about one-third of the cases only.

The first reliable or dependable symptom is the mid-abdominal symptom without which I seldom recommend operation. If we look only for severe mid-abdominal or

epigastric pain, we shall frequently fail to suspect appendicitis, but if we consider all mid-abdominal symptoms, we shall seldom fail to suspect appendicitis. The mid-abdominal symptom in the 951 cases appeared as follows:

Epigastric pain	401
Mid-abdominal pain	308
Indigestion	152
Nausea	239
Vomiting	462
General pain	47
Lower mid-abdominal pain.....	31
Bladder symptoms	10
No record of symptoms.....	32

The most common symptom of the mid-abdominal group was vomiting.

Some patients, of course, presented more than one of the symptoms in this group.

The symptoms and signs which all physicians know are pain and tenderness in the right lower quadrant. These are second in importance only in time of appearance. Because they are so reliable, the family physician seldom overlooks a case of appendicitis. I found that 850 cases of the 951 had pain in the right lower quadrant and 839 had tenderness. Only nine cases did not have any right lower quadrant symptoms and four of these had pain on the left side. As important as right lower quadrant symptoms are, when taken alone, mistakes will be made; but when considered with the mid-abdominal symptoms, mistakes need occur infrequently.

I have thus divided the signs and symptoms of appendicitis into two groups, the unreliable and the reliable, the latter of which are the mid-abdominal symptoms and right lower quadrant pain and tenderness. As the pain generally appears first mid-abdominally, the shift of the pain is down and out. Keeping in mind this arrangement of the two groups of symptoms and signs with the shift, the following findings are of interest:

Mid-abdominal symptoms absent.....	34 cases
Right lower quadrant symptoms and signs absent	9 cases
Doubtful diagnosis indicated by the right rectus or midline incision used.....	91 cases
Errors in diagnosis.....	19 cases

The errors in diagnosis were as follows:

1. B. B., age eleven, organized hematoma in the omentum, perhaps the result of injury. No right lower quadrant symptoms.
2. H. C., age twenty-five, tuberculosis of the peritoneum. No right lower quadrant symptoms.
3. E. C., age thirty-four, Henoch's purpura. Usual symptoms for appendicitis.

4. S. D., aged seventeen, acute salpingitis. Usual symptoms for appendicitis.
5. E. M., age eight, gonococcus peritonitis. Usual symptoms for appendicitis.
6. V. M., age fifty-five, retrocolic abscess. Typical symptoms, appendix normal.
7. J. M., age sixty-two, diverticulitis of the small bowel with abscess. Usual symptoms.
8. A. O., age twenty-five, gonorrheal peritonitis. Typical symptoms.
9. H. R., age four, peritonitis from perforation of an ulcer in the ileum next to the cecum. Typical symptoms.
10. R. F., age twenty-six, carcinoma of the stomach, chronic appendicitis. Typical symptoms from the chronic appendicitis, and obscure symptoms of the major lesion of carcinoma of the stomach.
11. A. B., age twenty-two, twisted omentum. Typical symptoms.
12. T. W., age ten, acute salpingitis. No mid-abdominal symptoms.
13. R. R., tuberculous peritonitis. No mid-abdominal symptoms.
14. C. M., age eighteen, acute salpingitis. No mid-abdominal symptoms.
15. I. B., twisted right tube. No mid-abdominal symptoms.
16. W. B., age twenty-one, general peritonitis from intestinal obstruction. He was too sick to answer questions intelligently.
17. Mrs. P. B., age thirty-eight, peritonitis. Unsatisfactory history.
18. Mrs. R. M., age twenty-six, history of appendix having been removed fifteen years before. History indicated appendicitis. Operation for intestinal obstruction and peritonitis. Conditions found at operation, general peritonitis from ruptured appendix.
19. A. R., age twenty-two, symptoms indicated an ectopic pregnancy. Pain in the lower abdomen and dribbling menstruation.

Two cases had no right lower quadrant symptoms; four had no midabdominal symptoms; nine had the usual symptoms, which is explained by the inflammatory extension of the exciting cause to the appendix or an involvement of the appendix additionally to the chief cause of illness. These fifteen patients recovered satisfactorily for the time being. The patient who had carcinoma of the stomach ultimately succumbed to the carcinoma. Four cases were diagnosed as some other condition for the reasons which I have stated. These four patients died.

Conclusions

The symptoms and signs of appendicitis may be divided into two groups:

Accessory (helpful but undependable because they were present in a diagnostic degree in a minimum of one-third to a maximum of two-thirds of the cases): Fever, leukocytosis, rigidity.

Dependable and important because they occurred in nearly 100 per cent of the cases: Mid-abdominal symptoms; pain and tenderness in the right lower quadrant.

My analysis convinced me that when the dependable symptoms are present, the percentage of errors in diagnosis will be small.

THE GASTRO-INTESTINAL SYNDROME IN CORONARY DISEASE

JOSEPH P. BERTUCCI, M.D.†
ISHPEMING, MICHIGAN

The question of coronary artery disease is of vast importance in the practice of medicine. Any physician of average knowledge is able to diagnose this correctly when the symptoms are referable to the chest but the question of coronary artery disease with symptoms simulating an acute abdominal condition is of greater importance and much more difficult to diagnose. This refers not only to the internist but more so to the surgeon who is called upon in consultation and who must make a differential diagnosis between coronary disease and acute operable conditions. The last question is of far greater importance when it is brought to mind that this disease is usually seen in males past forty, and especially in those individuals who occupy the upper economic strata of life, such as, lawyers, doctors, clergymen, etc. These men are striving for

success, be it economical, professional or political. This success is paid for by an early arterial degeneration. Osler¹⁶ stated:

"I believe that the high pressure at which men live, and the habit of working the machine to its maximum capacity, are responsible for arterial degeneration at an early age. Angina sclerosis, creeping on slowly but surely with no pace perceived, is the Nemesis through which nature exacts retributive justice for the transgression of her laws, slitting

†Dr. Bertucci was graduated from the Marquette College of Medicine and Surgery in the class of 1932. He served his internship in the Milwaukee County General Hospital. He is a member of the Michigan State Tuberculosis Sanatorium Commission.

the span of life in the fifth decade at a time when success seems assured."

This early degeneration is manifested by all the organs of the body, but especially the heart, which, after all, is the dynamic power or force which regulates our activities by furnishing the proper amount of fuel at the right time to the organism. As this organism goes on at its maximum speed, a time finally comes when signs and symptoms of beginning destruction become evident. The blood pressure goes up, leading to sclerotic processes in the arterial system, which, in turn, leads to narrowing of the lumen of these vessels, and to their inelasticity. As this process is going on, the heart must work harder in order to get enough nutritive material to the tissues. The heart, therefore, hypertrophies, but a time finally comes when the coronaries are so narrowed that the heart muscle cannot get enough oxygen and nutritive material when the individual is put to some added exertion, which demands that the heart increase its output. This condition is manifested by pain, which is suffered by the individual.

The pain may be of the classical anginal type, that is, substernal or precordial in character radiating to neck, down the left arm, or down both arms, but it also may be referred to the epigastrium. Rigidity and tenderness of the abdomen may be also present. This, coupled with nausea and vomiting several hours after a meal which relieves the pain, may be mistaken for some acute surgical condition of the abdomen by the attending physician. Unless the surgeon who is called into consultation is versed in the differential diagnosis of coronary disease, a grave error may be made which may end fatally for the patient. This fact was also pointed out by Osler¹⁶ in his lectures on angina pectoris, in 1896.

Angina pectoris, which is an early manifestation of coronary disease and final occlusion, was first described in the middle of the eighteenth century by Heberden, Jenner, and Hunter. John Hunter was a victim of this dreaded disease. He suffered his first attack in 1773, which was described in detail by his nephew, Everard Home. Following several attacks he finally succumbed to the disease. The last attack was precipitated by a fit of anger during a meeting of governors of St. George's Hospital in England, October 16, 1793. Home

performed the autopsy and found that the coronary arteries were sclerosed.

As was stated above, coronary artery disease is an end stage of the so-called syndrome of angina pectoris. The first to give an accurate account of this, in America, was Herrick in 1912. It is now generally believed that angina pectoris means sclerosis of the coronary arteries, and that mild attacks, such as attacks that last for a short period of time, mean beginning sclerosis of these vessels, while sudden attacks, lasting for a longer period of time, are due to a thrombosis.

As a direct result of obstruction of the coronary arteries the necrotic process in the heart muscle may extend outward and involve the pericardium, resulting in a pericarditis. This gives rise to pericardial friction rubs. Or it may extend into the endocardium, producing a mural thrombus. Pieces of this thrombus may break off and be carried through the blood stream, resulting in a hemiplegia, infarcts of the spleen, or pulmonary embolism, depending on whether the thrombus is in the left or the right ventricle. Also, the necrotic process may involve the interventricular septum, manifesting its presence by various types of blocks. And, too, the necrotic process may be so extensive as to result in an aneurysm which may later rupture, bringing about sudden death of the patient.

It was thought, at one time, that the coronary arteries were "end arteries" but it has been demonstrated that anastomoses were present, however small and insufficient they happened to be.¹³ If a coronary artery is occluded gradually, these anastomoses may develop to such an extent as to take care of the nutritive wants of the heart muscle, which may allow the patient to lead a fairly comfortable life, but if the coronary arteries are occluded suddenly, the collateral circulation is insufficient to carry the load. This leads to collapse, manifesting any one of the syndromes of coronary disease.

The intensity of the pain varies only with the degree of obstruction and also with the size of the vessel that is involved. The larger the vessel obstructed, the more severe will be the pain. As a direct result of a series of experiments with dogs, it was found that temporary or complete occlusion of a coronary artery produces pain. They also demonstrated that the course of the pain to the brain was through the sympa-

thetic system, as there was no evidence of pain when the stellate ganglion was severed, and presence of pain when the vagi only were cut. Nausea and vomiting also occurred during partial occlusion of the coronaries, even after the sympathetic route was severed. This gave conclusive evidence that vomiting was due to a reflex action.²⁵ Therefore, pain is due to interference of blood supply to the heart muscle, as pointed out by these workers, the intensity of which varies with the size of the vessel obstructed and the degree of obstruction.

The findings at autopsy depend on the length of time that has elapsed between the occlusion, subsequent obstruction, and death. If death occurs suddenly, the heart muscle appears normal, but if there is quite an interval between the attack and death, the heart muscle is paler, grayer, and softer than seen in the normal. If a longer time elapses between the attack and death, an infiltration of leukocytes, proliferative changes with lymphocytes and fibroblasts, young connective tissue, and newly formed blood vessels will be found. If the patient survives the attack, scar tissue is formed in the heart muscle as pointed out. As the patient goes on an aneurysm may be formed by the giving way of this fibrosed portion of the muscle. This may rupture, leading to instant death.

Either coronary artery may be involved—right or left. The artery that is usually involved is the anterior descending branch of the left coronary, which was called by Osler, "the artery of sudden death." This artery supplies the lower part of the left ventricle and the interventricular septum, but Whitten²⁷ has demonstrated that the terminal descending branch of the right and the circumflex branch of the left coronary arteries became involved just as frequently, but were overlooked. He also pointed out a peculiar anatomical condition of these arteries which may contribute to their sclerosis. He states that these arteries enter the heart muscle at almost right angles, and points out that this immobilization enhances their tortuosity, which leads to kinking and subsequent constriction of the lumen.

The sudden death of a person who has always been well, or who has a previous history of anginal attacks, nearly always means acute occlusion of a coronary artery, even though all the classical symptoms of coronary disease are not evident. This is

one of the most serious accidents in cardiology.

The onset of coronary artery disease is usually sudden, precipitated by a heavy meal or some other form of exertion, be it mental or physical. In those atypical cases, with the gastro-intestinal syndrome, the individual will be suddenly seized with an agonizing pain in the epigastrium, which may radiate to either upper quadrant. The pain is of a persisting character and is so severe that the patient has a fear of impending death. There is severe tenderness and rigidity, simulating a gall bladder attack, ruptured peptic ulcer, or acute pancreatitis. A gaseous distention, which, when expelled, affords some relief, is also present. Nausea and vomiting often accompany this condition. A history of previous attacks of "indigestion" is important in obtaining because, if properly evaluated, usually points to atypical anginal attacks. The rigidity and tenderness may simulate some intra-abdominal accident which may lead to an exploratory laparotomy and subsequent death. Shock is always present. Features are pinched; forehead is covered with perspiration; color is ashen-gray; pulse is weak and thready. Dyspnea may or may not be present, but if the history is gone into carefully the physician will elicit symptoms of some dyspnea which the patient states is of no significance. The heart is nearly always enlarged but, except for weak and distant heart tones, no abnormality is found. Pericardial friction rub is a diagnostic point but one must be on the lookout for it as it may be present only once or twice during the course of the illness. It appears about one to eight days following the attack. It is well worth one's while to make frequent examinations of the heart as it clinches the diagnosis. Fever is present about twenty-four hours after the onset of the attack. It usually ranges from 100 to 102 degrees Fahrenheit. A leukocytosis of from 10,000 to 25,000 may be found. The findings of a leukocytosis, coupled with other findings of an acute abdominal disease, will usually make the surgeon be in favor of an acute surgical condition, unless he is familiar with the fact that it is present in coronary infarction.

Occlusion of a coronary artery affects the function of the heart. The left ventricle is most commonly involved. This becomes damaged and is unable to carry the load.

The blood pressure falls and blood is dammed back upon the lesser circulation, resulting in edema of the lungs. This condition makes itself evident by the presence of râles at the bases of both lungs, which is nearly always present. Jaundice may be also present in some of these cases which, when associated with pain in the epigastrium radiating to the gall bladder region, may be mistaken for cholelithiasis with obstruction of the common bile duct. The following case demonstrates this clearly:

Case 1.—J. F., male, aged fifty-five, steelworker, underwent an appendectomy six years ago. Five years ago the patient suffered what was supposed to have been a gall-bladder attack. A laparotomy was performed but the gall bladder was found to be normal. Convalescence was long drawn out. Except for some epigastric distress the patient says that he was apparently well until August 11 of last year, when he was suddenly seized with what appeared to be a typical attack of coronary disease. His blood pressure at this time was 130 systolic and 80 diastolic. The patient gives a history of having had a hypertension of 188 systolic and 130 diastolic for many years. He was put under a strict cardiac regime but in spite of this suffered an attack approximately every four to six weeks. He was apparently holding his own when, in January of this year, he was suddenly seized with epigastric pains, radiating to the gall bladder area and to the back. He said that he felt a gaseous distention, which was relieved by the ingestion of bicarbonate of soda. A large quantity of bile was vomited on several occasions. A few days later he developed icterus which was quite intense. The next day his temperature was 100 degrees Fahrenheit. A leukocytosis was also present. The pulse was somewhat weak but regular. Beads of perspiration stood out on his forehead. The patient was in definite shock. The pain was of an excruciating type. He always feared impending death, as mentioned, after each attack. There was marked rigidity over the epigastrium and gall-bladder area. Dyspnea was present although not very marked. All opiates available were tried without any desirable results. The electrocardiographic tracing demonstrated an inversion of the "T" wave in leads I and II.

Under vigorous cardiac treatment the patient responded very well, when, on January 23, 1932, he suffered another attack of a similar nature. Vigorous treatment was again instituted. Jaundice disappeared in a few days and the patient felt well again. He was discharged a few days later when he insisted on leaving the hospital contrary to advice.

There was no question in our minds that this patient had coronary disease, but why might he not have had gall-bladder disease in conjunction with coronary disease? In view of the fact that he had undergone a laparotomy several years past, and a normal gall bladder found, would indicate that the icterus, plus the other gastric symptoms, would be another manifestation of coronary disease.

A case similar to this was reported from

the Massachusetts General Hospital.⁴ In the discussion, Dr. Mallory gives a logical reason for the jaundice in these cases of coronary disease with the gastro-intestinal syndrome. At autopsy the liver findings were "thrombophlebitis of the portal vein, which caused a partial obstruction of the extra-hepatic portion, multiple intrahepatic thrombi, and extensive necrosis of the liver." He states that such lesions may produce jaundice in these patients.

Case 1 was not difficult to diagnose because of the previous typical coronary attacks.

The following cases are more typical of those cases of coronary disease who present themselves with the gastro-intestinal syndrome only.

Case 2.—H. N., male, aged fifty years, entered Milwaukee County Hospital May 30, 1931, because of attacks of "stomach trouble." The present attack came on suddenly several hours after the evening meal. It was precipitated, so he thought, by the ingestion of eggs. His complaint was epigastric pain of a boring persistent type; also, gaseous distention. He also gave a history of weakness and dyspnea, which he has had for a long time, and which he placed no significance. This dyspnea was of several months duration. The balance of the history was negative, except for "rheumatism" twenty years ago.

On physical examination it was found that the peripheral arteries were sclerosed. Heart was enlarged. An auricular fibrillation was present. No murmurs or friction rubs were made out at this time. Temperature remained normal. On June 4 his white count was 13,000. The blood pressure was 120 systolic and 70 diastolic. Electrocardiograph tracing demonstrated an inversion of the "T" wave in all leads. A diagnosis of coronary occlusion was made by our clinical director, Dr. F. D. Murphy.

Under treatment the patient remained so well and free from symptoms that he insisted on leaving the hospital. He was subsequently discharged.

Case 3.—L. B., aged fifty-two, entered Milwaukee County Hospital on January 1, 1932, with the following complaints: Sudden attack of agonizing, persisting epigastric pain five hours after the evening meal, gaseous distention, and vomiting. The vomiting afforded some relief. There was no dyspnea. The patient stated that he had a similar attack last summer, following a heavy meal.

Examination revealed an obese, middle-aged man who seemed to be in great distress. The thorax was of the emphysematous type. Râles were heard in both bases. Apex of the heart could not be palpated. Tones were distant and hardly perceptible. There was extreme tenderness in the epigastric area, but no rigidity. Liver was enlarged and somewhat tender. Blood pressure was 115 systolic and 75 diastolic. Temperature slightly elevated. Leukocytosis of 10,950. The electrocardiographic tracing was very suggestive of coronary disease. A diagnosis of coronary disease was made by our clinical director, Dr. Murphy.

The patient was very uncoöperative and was discharged on January 15, 1932.

Case 4.—A. D., aged forty-eight, entered Milwaukee County Hospital on December 4, 1931, with the following complaint: Four days previously he was

suddenly seized with epigastric pain of a severe agonizing, and persistent character. The patient stated that the pain was different from any other pain that he had ever experienced in all his life. He feared that death was upon him. He was taken to emergency hospital where opiates were given after a diagnosis was made. Two days later patient insisted he be discharged.

The night before entering the hospital he suffered a similar attack, this time associated with dyspnea and vomiting, which afforded him some relief. There was some cough also.

Examination revealed a well-nourished man, past forty, who seemed to be in great distress. Color was ashen-gray. The thorax was of the emphysematous type. Many râles were heard at the bases of both lungs. Many sonorous râles were heard throughout. The peripheral arteries were markedly sclerosed. The heart was slightly enlarged. The tones were weak and distant. The abdomen was not tender or rigid. The liver was not palpable or tender. In this case the electrocardiographic tracing was normal. The temperature on entrance was 99.6 while on the next day it rose to 100.6 degrees Fahrenheit. No leukocytosis. Blood pressure was 115 systolic and 75 diastolic. A diagnosis of coronary disease was made by Dr. Murphy.

On December 6 the patient suffered another attack of a similar nature. Following this the patient felt so well that he insisted on going home, in spite of advice to the contrary. He was discharged on December 10, 1931.

Case 5.—A man, aged seventy-nine, steam engineer, entered Milwaukee County Hospital September 17, 1931, because of "stomach trouble." He had suffered epigastric pains, after eating, for several years past. These attacks had not been of a severe type. Yesterday, while taking a walk, he was suddenly seized with intense pain in the epigastrium, radiating to the left upper quadrant and the back. This pain was of such a boring character that he had to sit down on the curb. He stated that he had a sense of impending death.

Examination revealed a small nodular mass in the stomach. Liver was large and tender. Râles were heard at the bases of both lungs. The heart was enlarged. The tones were weak and distant. The second aortic sound was accentuated. The peripheral arteries were sclerosed. Blood pressure was 150 systolic and 96 diastolic. Gastro-intestinal fluoroscopy and K.U.B. were negative. The temperature was slightly elevated. The leukocyte count was 10,900. The electrocardiographic tracing revealed inversion of the "T" wave in all leads. A diagnosis of coronary disease was made by our clinical director, Dr. Murphy.

The patient expired on November 29, 1931, following a sudden attack. An autopsy could not be obtained.

Case 6.—R. T., male, aged fifty, entered the Milwaukee County Hospital on May 6, 1931, with the following complaint: He stated that he suffered slight attacks of epigastric pain, several hours after the evening meal, for the past several years. This pain was associated with mild dyspnea. Of late the attacks are becoming more frequent and of a more severe and persistent character. Dyspnea comes on the slightest exertion, which is very distressing to the patient. He has been in the habit of taking large doses of magnesium sulphate during these attacks but no benefit has been derived from this type of medication. Vomiting relieves the pain to some extent.

Examination revealed a well developed but obese male who seemed to be in great distress. Râles were heard at the bases of both lungs. The heart was somewhat enlarged. The tones were weak and distant. A distinct gallop rhythm was made out.

The blood pressure, on entrance, was 180 over 110, while a few days later it dropped to 150 systolic. The temperature remained normal throughout the course of the illness. The blood count also remained normal. The electrocardiographic tracing demonstrated an inversion of the "T" wave in leads I and II.

The patient expired on June 10, 1931. An autopsy was not permitted but a diagnosis of coronary disease was made by Dr. Murphy.

In view of its infrequent occurrence, coronary artery disease, with the gastro-intestinal syndrome, is most difficult to diagnose. This subject should be kept in mind by all clinicians and especially surgeons, not only because of its infrequency, but also due to the fact that some surgeons do not keep up with the progress of internal medicine in general. Unless a surgeon has a general knowledge of internal medicine in general, as well as surgery, a grave mistake may be made, resulting disastrously for the patient.

It was pointed out by Halsey¹¹ that "coronary artery disease accounts for about a fifth to a half of the patients cared for by physicians." This statement should point out to all medical men, physicians and surgeons alike, the great importance of this one disease. While so-called angina pectoris, or beginning coronary sclerosis, is not difficult to diagnose, the atypical type of coronary disease, with the gastro-intestinal syndrome, may not be readily recognized. The condition may, and often is, mistaken for some gastric disorder. In every individual past forty, and especially in those patients whose arteries are sclerosed, it is always well to bear in mind the question of coronary artery disease in evaluating the presenting symptoms and the past history. It is true that the presenting symptoms, in those atypical cases, may lead the physician astray, but the past history will always be of value in making a final diagnosis.

The onset of the condition is nearly always associated with some form of dyspnea, which may be followed by some other sign of beginning cardiac failure. In those cases where the heart is beginning to fail, the diagnosis is comparatively easy but at times the symptoms of cardiac failure are absent. In these cases the detection of arrhythmias and distant heart tones should call the physician's attention to the heart. If the physician watches his patient closely, making frequent examinations of the heart, he will often be rewarded with definite findings of cardiac involvement. One may also find, twelve to twenty-four hours after the

attack, the presence of an elevated temperature and leukocytosis. These signs may be absent, however, throughout the entire course of the illness.

It is possible that these patients may actually have gall-bladder disease, perforating peptic ulcers, or acute pancreatitis, instead of coronary disease. In those cases where there is doubt, an electrocardiographic tracing will establish the correct diagnosis. At times, the electrocardiographic tracing will not show any deviation from the normal but if, in these cases, it is repeated at stated intervals, a definite deviation from the isoelectric level will be detected.

It is wise for the consulting surgeon to take advantage of the electrocardiogram in studying the differential diagnosis of these atypical cases of coronary disease with the gastro-intestinal syndrome. The electrocardiogram is now a part of the necessary equipment of every modern hospital and should be used more often in all cardiac cases, especially in those where there is doubt as to the correct diagnosis. The earliest cardiographic changes that are of the greatest significance in coronary disease are the negativity of the "T" wave and the beginning changes in the ventricular complexes, which are due to interference of the blood supply to the heart muscle.¹⁰

It is well to bear in mind, in considering the differential diagnosis, that coronary disease may develop suddenly, simulating some intra-abdominal accident. The most important are cholelithiasis and cholecystitis. The pain of the former is usually referred to the right scapular region and never to the chest and down the left arm. This pain is usually of the colicky type and can be controlled, in contrast to that of coronary disease, with relatively small doses of opiates. There is extreme tenderness in the gall bladder area. Bile is usually found in the urine.

In acute pancreatitis the pain comes in paroxysms which is intense in character. The upper abdomen is distended and rigid. Extreme shock and frequent vomiting are present.

In peptic ulcers which have perforated, there is sudden pain in the epigastrium, radiating downward but never to the chest. There is tenderness and rigidity of the abdominal walls. In these cases there is no evidence of cardiac failure.

Many other conditions must also be con-

sidered in the differential diagnosis, such as gastric crisis of tabes dorsalis, subdiaphragmatic pleurisy, renal colic, tumors of the cord, and herpes zoster.

The past history, distant heart sounds, changes in blood pressure and other signs of cardiac failure, plus the abnormal electrocardiographic tracing, will enable the attending physician to arrive at a correct diagnosis.

Summary

Coronary artery disease, with the gastro-intestinal syndrome, is a most important clinical entity, and often very difficult to diagnose. Surgeons, in general, should have a clearer knowledge of this subject in considering the differential diagnosis. The internist should also be acquainted with various syndromes of coronary disease.

Coronary artery disease occurs more frequently in males past forty, especially in those leading a strenuous life, which predisposes to early arterial degeneration.

Previous history of periodic attacks of "indigestion," high blood pressure, and dyspnea on exertion are significant factors in coronary disease.

As a result of coronary occlusion the infarcted area in the heart may extend to the endocardium, resulting in a mural thrombus. This may result in embolism leading to various catastrophes.

Coronary arteries are not "end arteries," as anastomoses can be demonstrated.

Pain is of an intense and persistent type and referred through the sympathetic system.

Either coronary artery may be involved but the anterior descending branch of the left is involved more often than the others.

Onset of coronary artery disease may simulate any gastric disorder. The history, past and present, is of vast importance in evaluating the symptoms.

The following points help in arriving at a correct diagnosis: Dyspnea, rales in the bases of both lungs, fall in a previously elevated blood pressure, enlargement of the liver with tenderness, enlargement of the heart with weak and distant tones, irregularities, and pericardial friction rubs.

Fever and leukocytosis are usually present 24 to 48 hours following the attack.

The electrocardiographic tracing is of diagnostic importance in these cases. It should be used more often by physicians and surgeons alike.

Coronary artery disease should be differentiated from the following conditions: Cholelithiasis, cholecystitis, perforated peptic ulcers, gastric crisis of tabes dorsalis, subdiaphragmatic pleurisy, renal colic, tumors of the cord, and herpes zoster.

References

1. Anderson, J. P.: Differentiation between coronary thrombosis and acute abdominal conditions. *Jour. A. M. A.*, (Sept. 29) 1928.
2. Barnes, A. R., and Ball, R. G.: The incidence and situation of myocardial infarction in 1,000 consecutive post-mortem examinations. Staff meetings of the Mayo Clinic, (Dec. 17) 1930.
3. Barnes, A. R., and Whitten, M. B.: Study of T-wave negativity in predominant ventricular strain. *Arch. Int. Med.*, (October) 1929.
4. Case Report: New England *Jour. Med.* Case 18051, p. 236, (Feb. 4) 1932.
5. Christian, H. A.: Cardiac infarction (coronary thrombosis): An easily diagnosable condition. *Amer. Heart Jour.*, (December) 1925.
6. Christian, H. A.: Diseases of the heart. Oxford Monograph on Diagnosis and Treatment. Volume III.
7. Coffen, T. Homer, and Rush, Homer P.: Acute indigestion in relation to coronary thrombosis. *Jour. A. M. A.*, (Dec. 8) 1928.
8. Eggleston, C.: Coronary thrombosis. Textbook of Medicine by Cecil. Second Edition.
9. Faulkner, J. M., Marble, H. C., and White, P. D.: The differential diagnosis of coronary occlusion and of cholelithiasis. *Jour. A. M. A.*, (Dec. 27) 1924.
10. Gilchrist, A. R., and Ritchie, W. T.: The ventricular complexes in myocardial infarction and fibrosis. *Quart. Jour. Med.*, (April) 1930.
11. Halsey, R. H.: Etiology of heart disease. *Jour. A. M. A.*, (Feb. 20) 1932.
12. Hardt, L. L.: Coronary thrombosis simulating perforated peptic ulcers. *Jour. A. M. A.*, 82:692, 1924.
13. Herrick, James B.: Clinical features of sudden obstruction of the coronary artery. *Jour. A. M. A.*, (Dec. 7), 1912.
14. McCrae, T.: Angina pectoris: Is it always due to coronary artery disease? *Amer. Jour. Med. Sci.*, (January) 1930.
15. Mackenzie, Sir J.: Principles of Diagnosis and Treatment in Heart Affections. Third Edition.
16. Osler, Sir William: Angina Pectoris and Allied States, 1897.
17. Osler, Sir William: Principles and Practice of Medicine. Revised and enlarged by McCrae. Eleventh Edition.
18. Portis, B.: A case of coronary thrombosis simulating an acute surgical condition of the abdomen. *Surg. Clinics No. Amer.*, (April) 1930.
19. Smith, F. M.: Coronary artery disease. *Jour. Iowa State Med. Soc.*, (June) 1931.
20. Smith, F. M.: Angina pectoris. *Jour. Iowa State Med. Soc.*, (July) 1931.
21. Smith, F. M.: Coronary occlusion. *Jour. Iowa State Med. Soc.*, (August) 1931.
22. Smith, F. H.: Coronary disease as a factor in failing heart. *Virginia Med. Month.*, (December) 1931.
23. Steven, J. D.: Lectures on the fibroid degeneration and allied lesions of the heart, and their association with disease of the coronary artery. *The Lancet*, (Dec. 31) 1887.
24. Sutton, D. C.: Coronary occlusion. *Med. Clinics No. Amer.*, (July) 1928.
25. Sutton, D. C., and Lueth, H. C.: Pain. *Arch. Int. Med.*, (June) 1930.
26. Warfield, L. M.: Tice's Practice of Medicine. Volume VI.
27. Whitten, M. B.: Relation of distribution and structure to myocardial infarction. *Arch. Int. Med.*, (March) 1930.
28. Willius, F. A.: Infarction of the myocardium. *Atlantic Med. Jour.*, (October) 1925.
29. Willius, F. A.: Prognosis in heart disease. *Minnesota Med.*, (May) 1931.
30. Willius, F. A., and Giffin, H. Z.: The anginal syndrome in pernicious anemia. *Amer. Jour. Med. Sci.*, (July) 1927.

THE DEVELOPMENT OF THE X-RAY DIAGNOSIS OF GALL-BLADDER DISEASE*

ARTHUR R. BLOOM, M.D.†
DETROIT, MICHIGAN

The history of x-ray diagnosis of the gall bladder can be dated from 1899, when Carl Beck³ of New York presented two cases in which he demonstrated gall stones on a radiograph. In 1906, he⁴ stated that a gall bladder containing stones and fairly well filled with bile leaves a tumor-like shadow on the plate. This important observation passed unnoticed for nine years. After Beck's paper there were sporadic reports of radiographic demonstration of stones in isolated instances, but in 1913 Case⁷ reported the first series. He demonstrated stones in 40 out of 1,000 routine examinations. His work was followed by reports from Cole⁹ and Pfahler.²³ In 1914, George and Gerber¹³ stated there were two kinds of gall stones, namely: those containing large amounts of calcium, which could be easily demonstrated, and those containing little or no calcium, which could not be demonstrated. The reports of finding gall stones by x-ray gradually increased, and in 1924, Carmen, MacCarty, and Camp⁶ reported the

findings of 38.4 per cent of gall stones in 226 operated cases.

Secondary Findings

The era of secondary findings began with Pfahler's publication, in 1911. He reported that he had observed the displacement of the stomach and duodenum to the right and upwards as evidence of adhesions from a cholecystitis. Further signs were reported by Case,⁷ in 1913, and Cole,⁹ in 1914. From this work the necessity of doing a complete gastro-intestinal examination in gall bladder cases was realized.

George and Leonard¹⁴ in their book, "The

*Read before the North End Clinic, January 23, 1936, as one of the third series of the Dr. Max Ballin Memorial Lectures.

†Dr. Bloom was graduated from the University of Illinois School of Medicine in 1922. He served his internship at the Michael Reese Hospital, 1922-24. A Diplomate of the American Board of Radiology, he has been Radiologist at the North End Clinic, Detroit, since 1927.

Pathological Gall Bladder," reported the following indirect evidence:

Deformities Due to Pressure.—These deformities consist of a semicircular, smooth pressure defect most commonly seen in the cap, but often at the antrum of the stomach, the second portion of the duodenum, and sometimes the colon. Their explanation of this finding is as follows: They believe that the tension in a normal gall bladder is less than that of the food-filled duodenum, stomach or bowel, whereas in a pathological gall bladder which consists of a thickened wall or increase in fluid, or the presence of stones, the tension is greater. The diseased gall bladder pressing on these organs produces a "seat" which can be demonstrated when the stomach and duodenum are filled with barium.

Deformities Due to Adhesions.—Adhesions may cause a change in contour and position of various parts of the gastrointestinal tract. Adhesions around a duodenum will produce a bizarre and toothed appearance but the irregularity is inconstant. In some instances, the deformity may be so great as to completely obliterate the normal outline of the cap. The second portion of the duodenum may be displaced towards the right and upwards and may be narrow and irregular. The jejunum and colon may also be displaced to the right. A small portion of the transverse colon may present the appearance of being pulled out.

Spastic Changes.—These changes may occur in the stomach or duodenum. They are a reflex manifestation. The distal third of the stomach may become uniformly contracted, producing a tubulated outline an inch or so in diameter.

Filled Ampulla Vater.—This is usually demonstrated as a patch of barium opposite the medial side of the second portion of the duodenum which is due to a patulous ampulla Vater. This finding is always associated with a pathological gall bladder.

Many authors consider the indirect evidence far more important than the direct. I believe that the demonstration of these signs is still of considerable value and it is to be regretted that of late years they have been minimized.

Primary Shadow

Although, as early as 1906, Beck⁴ claimed that the diseased gall bladder often casts a shadow on the x-ray film, it was not until

1915, when George,¹² and in the following year with the collaboration of Leonard,¹⁵ announced their observations. Their contentions were based on the following premises: While examining plates for evidence of stones, they frequently saw a pyriform shadow in the gall bladder region which either surrounded the stones or was alone. They followed these patients to the operating room and found that the gall bladder was pathological. Applying the results of these observations and calling all cases on whom a shadow was visualized pathological, they had a high incidence of operative verification. These observations were based on a principle sound in physics and pathology, for when the gall bladder becomes diseased its density is increased over the normal because the wall is thickened, or the bile is thickened, or there are stones present.

This was accepted by many clinicians and roentgenologists, notably, Moynihan, Kirklin, who was then in Muncie, Indiana, and Arens of the Michael Reese Hospital. George and Leonard¹⁵ quoted their statistics as 88.4 per cent correct diagnoses. Our findings¹¹ at Michael Reese Hospital, based on the combination of the gall bladder shadow and secondary findings, were as follows:

The diagnosis was correct in 88 per cent of pathological cases verified by operation.

It was correct in 85 per cent of normal cases verified by operation.

It was considered correct in 75 per cent of normal cases not operated upon. These cases were sent to the x-ray department without any history so that the roentgenologist did not know whether they were normal or pathological.

These findings were not universally accepted by all roentgenologists. I believe that one of the reasons for this skepticism was that the method required painstaking technic on the part of the roentgenologist and patient. It also required considerable training in identifying the shadow. For several months, after I first started in roentgenology, I was unable to recognize a gall bladder on a primary film until it was pointed out to me. I would marvel at the clearness of the shadow and feel chagrined that I had missed it at first. Case contended that various organs, such as the duodenum, antrum of the stomach or small bowel, cast a shadow which might be mistaken for a gall bladder. At the Michael Reese Hospital we took another film in the same position,

using the same technic after the patient had a barium meal. This would outline the confusing shadows. Since the advent of cholecystography, we compare the dye-filled shadow with the primary plate.

Notwithstanding the many controversial opinions, the normal gall bladder is not routinely visualized on primary films. In spite of the severe criticism of the primary film or older methods, I still believe it has its place and should not be discarded. I believe that the gall bladder which casts a shadow on the primary film is diseased in spite of the fact that it may function normally as to filling, concentration and emptying of the dye.

Cholecystography

In the latter part of the 19th century, von Bayer discovered the phthaleins and in the early part of the 20th century it was found that certain of these phthaleins were excreted almost completely in the liver. In 1909, Abel and Rowntree,¹ while searching for a hypodermic purgative, discovered phenoltetrachlorophthalein which was developed as a substance for liver function and phenolsulphonephthalein for kidney function.

In the early part of February, 1924, Graham, Cole and Copher¹⁶ announced their monumental work of cholecystography which revolutionized the x-ray study of gall bladder disease. Basing their work on that of Abel and Rowntree¹ they tried out various derivatives of the phthalein group. In these they substituted radicals of high atomic weight for those of low atomic weight. Among the many substances which they tried out was tetrastatodiphenolphthalein but discarded it because they thought it was too toxic. They later selected the calcium salt of tetrabromphenolphthalein. This they soon discarded for the sodium salt.

Whittaker and Milliken²⁸ shortly afterwards demonstrated that approximately one-half as much of sodium tetrastatodiphenolphthalein need be used as the tetrabromphenolphthalein salt, and the smaller dose was less toxic. This was soon confirmed by Graham and Cole.

Menees and Robinson²¹ were the first to use the oral administration of dye. They tried out various types of containers which would not dissolve in the stomach but disintegrate in the intestines. They used salol and keratin coated capsules but found best

results with formalin hardened gelatin capsules. Various types of commercially prepared capsules appeared on the market but our results have been more or less unsatisfactory with them.

Kirklin¹⁸ recommended the use of four grams of pure dye, freshly dissolved in one ounce of distilled water and given in grape juice after a fat-free supper. I have used this technic for several years and have found it entirely satisfactory.

For a long period there was quite a controversy as to which method should be used. Men like Sherwood Moore, Case, Blaine and others insisted that the intravenous was preferable to the oral administration, because a known quantity of dye was put into the blood stream and there was no chance of lack of absorption from the gastro-intestinal tract, which they considered a variable factor. However, Kirklin found that the difference of efficiency between the two methods did not amount to more than one or two per cent.

The drawback to intravenous injection aside from the greater inconvenience is that there is a possibility of a thrombophlebitis resulting at the site of injection. Workers noticed that they received more or less severe reaction following the intravenous method. In 1924, we had a near fatality at the Michael Reese Hospital after the injection of sodium tetrabromphenolphthalein. I have never used the intravenous method since.

Palmer and Ferguson,²⁴ in 1933, reported that out of 2,135 patients one-half had reactions ranging from transitory to severe. Three cases were very severe and there was one death.

Recently the intensified method of oral cholecystography has been advocated by some. This is based on the observations of Antonucci,² that adding to the glucose reserve of the body may accelerate oral cholecystography, and of Sandstrom,²⁵ that giving the dye in fractional doses increased the density of the shadow. In 1927, Feldman¹⁰ recognized the fact that large doses must be given to obtain the best results.

Stewart and Illick²⁶ recommended a method which is complicated and tedious. A simpler procedure is the giving of two doses of dye; one after lunch and one after supper, which consists of carbohydrates. The drawback to this method is that more pathological gall bladders will fill. However, in

these cases there must be convincing clinical evidence of disease before this type of a gall bladder is removed.

Mechanism

As stated above, the principle of cholecystography is that the dye is taken up by the blood stream, secreted by the liver through the biliary ducts into the gall bladder where it is concentrated. The greatest density is reached at eighteen hours after the oral administration of dye. It will contract almost completely two hours after the fat meal.

In order for the gall bladder to be visualized it is necessary that:

1. The liver secrete the dye.
2. The hepatic, cystic and other ducts be patent.
3. The gall bladder have the ability of emptying and filling itself.
4. That the gall bladder once filled be of sufficient size to cast a shadow.
5. The gall bladder be able to concentrate the dye.

Failure of the gall bladder to fill at all or faintly may be due to the following:

1. A stone obstructing the cystic duct.
 2. Edema or spasm of the cystic duct.
- This type will give a lack of filling at one time and a good filling, another. These patients should be put on antispasmodics and sedatives and the test repeated.

3. Bronne and Schüller⁵ believed that an inflammatory process of the mucosa may cause too rapid absorption of the dye.

4. Chiray and Panel⁸ believe that an inflammatory process of the mucosa interferes with concentration of the dye.

5. The walls of the gall bladder may be abnormally thickened and the lumen very small, and there would be insufficient dye to cast a shadow.

6. The bile in the gall bladder may be too thick to mix with the dye.

7. The gall bladder may be packed with non-opaque stones so that no dye can enter.

8. Failure to observe the proper technic. Kirklin¹⁹ claims that a meal containing fats taken before ingestion of the dye results in 25 per cent more cases of faint or no shadow than if the meal contains no fats.

9. Many authors state that vomiting within one hour shows no shadow. Although this seems logical, I have seen some of the best shadows in patients who vomited.

10. Bowel derangement may interfere

with absorption. Lahey and Jordan²⁰ claim that in twenty-eight out of sixty-five cases, the gall bladder at first failed to fill. When the test was repeated five to ten days after bowel management, the gall bladder presented a normal shadow.

11. Many claim that high gastric acidity will interfere with the gall bladder shadow. My experience, as well as that of Stewart and Illick, does not bear this out.

12. Carcinoma of the pancreas or liver may result in a faint or absent shadow. The differential diagnosis can not be made from the Graham-Cole test. It is interesting to note that these cases also present a gall bladder shadow on the primary film.

Deformity of the gall bladder may be due to an anomalous gall bladder or to pericholecystic adhesions. Occasionally, surgeons have reported normal gall bladders on operation.

Failure of the gall bladder to contract is usually due to a thickened or rigid wall.

Whittaker²⁷ has shown that the gall bladder definitely emptied into the duodenum through the cystic and common duct and disproved the theory of Sweet and Halpert that the bile was absorbed by the lymphatics. He found that the gall bladder empties only during digestion of fats in the duodenum and intestine. The emptying is produced primarily by the tonus of the wall of the gall bladder. No one has ever demonstrated peristaltic waves of the gall bladder. He also found that cutting one or both vagi or stimulating them electrically or by drugs or denervating the gall bladder has no effect. He could find no direct evidence of expulsive hormonal action although Ivy¹⁷ later announced cholecystokinin.

The action of the sphincter papillæ seems to be to allow the gall bladder to fill during the interval between periods of digestion but the vesicles will not empty after the sphincter is cut unless there is ingestion of the fats.

It must be realized that cholecystography is only a test of physiological function, except when it demonstrates stones. Furthermore it must be realized that a gall bladder may be diseased and still function normally. A simple proof of this is the fact that cholesterol stones are frequently demonstrated on a film after cholecystography. If the gall bladder did not function, the negative shadows of the stones would not be seen. Richter was among the first to cau-

tion against the acceptance of a normally functioning gall bladder as ruling out gall bladder disease. Cholecystography is only one sign or symptom in the diagnosis of gall bladder disease. The findings must be properly evaluated with the history and physical examination.

The percentage of accuracy of cholecystography may be stated as follows:

	Per cent
Demonstration of stones.....	100
Non-filling	95
Faint filling	50-75
Normal filling	70-80

In conclusion, I believe that the best results are obtained by using a combination of the primary film method, cholecystography and a gastro-intestinal examination. Whenever I see a shadow on the primary film, I consider this evidence of disease and a normally filled gall bladder serves only to confirm the original shadow.

Bibliography

- Abel, J. J., and Rowntree, L. G.: On pharmacological action on some phthaleins and their derivatives with special reference to their behavior as purgatives. *Jour. Pharmacol. and Exper. Therapy*, 1:231, 1909-1910.
- Antonucci, C.: La Cholecystographie Rapide. *Presse Med.*, 40:983, 1932.
- Beck, C.: On detection of calculi in liver and gall bladder. *New York Med. Jour.*, 73:73, (Jan. 20) 1900.
- Beck, C.: Cholelithiasis. *New York Med. Jour.*, 84:469, (Sept. 8) 1906.
- Bronne, H., and Schuller: *Klin. Wchnschr.*, 9:1625, (Aug. 30) 1930.
- Carman, R. D., MacCarty, W. C., and Camp, J. D.: Roentgenologic diagnosis of cholecystic disease. *Radiology*, 2:80, (February) 1924.
- Case, J. T.: Roentgenoscopy of the liver and biliary passages with special references to gall stones. *Jour. Am. Med. Assn.*, 61:921, (Sept. 20) 1913.
- Chiray, M., and Panel, J.: *Traite de Physiologie, Normale et Pathologique*. Paris: Masson et Cie, vol. III, 1926.
- Cole, L. G.: Roentgenographic diagnosis of gall stones and cholecystitis. *Surg., Gynec. and Obst.*, 18:218, (February) 1914.
- Friedenwald, J., Feldman, M., Kearney, F. X.: Further experimental studies in cholecystography. *Jour. Amer. Med. Assn.*, 89:195, (July 16) 1927.
- Friedman, J. C., Strauss, A. A., Arens, R. A.: A clinical radiological study of the gall bladder. *Radiology*, (August) 1925.
- George, A. W.: Further notes on roentgen diagnosis of gall stones. *Interstate Med. Jour.*, (Supplement) 23:13, 1916.
- George, A. W., and Gerber, I.: Observations from study of a thousand gastro-intestinal cases. *Am. Jour. Roentgenol.*, 2:592, 1915.
- George, A. W., and Leonard, R. C.: Pathological gall bladder. *Annals of Roentgenology*. New York: P. B. Hoeber, 1922, vol. II.
- George, A. W., and Leonard, R. D.: Roentgen diagnosis of pathological gall bladder. *Amer. Jour. Roentgenol.*, 4:321, 1917.
- Graham, E. A., and Cole, W. H.: Roentgenologic examination of gall bladder: Preliminary report of new method utilizing intravenous injection of tetrabromophenolphthalein. *Jour. Am. Med. Assn.*, 82:613, (Feb. 23) 1924.
- Ivy, A. C., and Bergh, G. S.: The applied physiology of the extrahepatic biliary tract. *Jour. A. M. A.*, 103:1500, (Nov. 17), 1934.
- Kirklín, B. R.: Cholecystography, a general appraisal. *Arch. Surg.*, 18:2246, (June) 1929.
- Kirklín, B. R.: Necessity for accurate technique in oral cholecystography. *Amer. Jour. Roentgenol.*, 25:595, (May) 1931.
- Lahey, F. H., and Jordan, S. M.: *Trans. Am. Gastroenterological Assn.*, p. 54, 1930.
- Menees, T. O., and Robinson, H. O.: Oral administration of sodium tetrabromophenolphthalein: Preliminary report. *Am. Jour. Roentgenol.*, 13:368 (April) 1925.
- Pfahler, G. E.: Gastric and duodenal adhesions in the gall bladder region, and their diagnosis by roentgen ray. *Jour. Am. Med. Assn.*, 56:1777, (June 17) 1911.
- Pfahler, G. E.: Roentgen rays in diagnosis of gall stones and cholecystitis: Improvement in technic. *Jour. Am. Med. Assn.*, 62:1304, (Apr. 25) 1914.
- Palmer, W. L., and Ferguson, A. N.: Intravenous cholecystography, reaction and contraindication. *Trans. Assn. of Amer. Phys.*, 48:385, 1933.
- Sandstrom, C. De la: Cholecystographie par voie buccale et de sa Valeur. *Jour. de radiol. et d'electrol.*, 16:358, 1932.
- Stewart, W. H., and Illick, H. E.: Advantages of intensified oral cholecystography. *Amer. Jour. Roentgenol.*, 33:624, (May) 1935.
- Whittaker, L. R.: The mechanism of the gall bladder. *Amer. Jour. Physiol.*, 78:411, (October) 1926.
- Whittaker, L. R., and Milliken, G. A.: A comparison of sodium tetrabromophenolphthalein with sodium tetraiodophenolphthalein in gall bladder radiography. *Surg., Gynec. and Obstet.*, 40:17, (January) 1925.

ADRENAL CORTICAL INSUFFICIENCY

ROBERT L. SCHAEFER, M.D., and FRED L. STRICKROOT, M.D.
DETROIT, MICHIGAN

Despite the denial of the occasional experimentalist, the development of a potent adrenal cortical extract has materially altered the clinical condition known as Addison's disease. This alteration is principally in the immediate prognosis, the ultimate prognosis being in no way affected. The life span of these patients is definitely increased and they are made more comfortable. The medicament employed in this series of cases is termed "Adrenal Cortex Extract" (Upjohn).*

The clinical picture of Addison's disease is characterized by a striking myasthenia with or without cachexia, marked gastro-intestinal symptomatology, pigmentation, and, not infrequently, so-called Addisonian crises. This new form of therapy is capable of re-

lieving the above complex with the exception of the pigmentation, though this, too, when sole intent of adding three indisputable cases of total Addison's disease and two cases of mild, is affected. This publication has the

*This was furnished through the courtesy of Dr. George Cartland and Mr. L. W. Bristol of the Upjohn Company.

partial Addison's, or partial adrenal cortical insufficiency.

The incidence of Addison's disease is comparatively rare, and it would seem apparent that the indications for this new organotherapeutic product would be of only occasional value. To the interested physician, however, it has opened a new field for clinical investigation, and the astuteness of the diagnostician is challenged in determining other syndromes which may be related to a cortical hormone deficiency giving to this product a more generalized usage. It is a well known fact that the commonest etiological factor in the production of Addison's disease is tuberculosis, and it is usually associated with serious tuberculous infection elsewhere in the body, usually pulmonary, though syphilis, too, must be considered. Recent clinical research indicates that adrenal atrophy is also a considerable factor in production of this disease.³

The following statistical data were collected by William L. Brosius, pathologist at Herman Kiefer Hospital, Detroit. From 1930 to 1935 inclusive there were 8,133 tuberculous admissions. Addison's disease was recognized clinically in only two cases, one of which was confirmed by autopsy. However, pathological diagnosis of tuberculosis of the adrenals was made in seven cases. In none of these seven were there any associated Addisonian symptoms. Two of the patients reported in this publication as total Addisonian cases are at the present writing confined in this institution. The third, in which the diagnosis was confirmed at autopsy, was a private patient. In the two partial deficiencies a clinical diagnosis of tuberculosis could not be established.

The extract which was employed is prepared from fresh beef adrenal glands which are frozen upon removal from the animal and shipped to the laboratory frozen in dry ice. These glands are chopped in a frozen condition and extracted immediately. Enzymatic changes at the early crude stages are minimized by working in the cold. In the early steps of the process, the active material is obtained as a crude aqueous extract. This is further purified by the employment of suitable immiscible solvents which accomplish the complete removal of fats, phospholipins, proteins, epinephrine and undesirable substances which are responsible for the toxic reactions often observed following the injection of crude

extracts. The purified material is water-soluble and is supplied in physiological saline containing 10 per cent alcohol. The extract is sterilized by Berkfeld filtration, packaged in sterile vials and subjected to the usual tests for sterility.

The finished extract is a sterile aqueous solution containing 0.9 per cent sodium chloride and 10 per cent alcohol. The pH is approximately 5. Each 1 c.c. contains the adrenal cortical hormone fraction prepared from 40 grams of fresh gland. The extract contains, exclusive of added sodium chloride, 0.7 to 1.0 mg. of solids per c.c. The total nitrogen is less than 0.1 mg. per c.c. of extract. The epinephrine content of the solution is less than 1 part in 400,000 as determined by the dog blood-pressure method.

Each lot of extract is assayed by the adrenalectomized dog method of Pfiffner, Swingle, and Vars.² In addition, it is also tested on adrenalectomized rats using the procedures similar to those of Kutz.¹

1. Doses of 5 c.c. (per animal) injected subcutaneously in guinea pigs weighing 300 to 400 grams produce no toxic symptoms.
2. Doses of 5 c.c. per kilogram injected intravenously in rabbits produce no toxic effect upon the circulation or respiration.

The human dosage of any given product cannot be estimated arbitrarily in cubic centimeters nor grains. The tolerance and the needs of every patient are entirely individual and administration is so determined. In this instance or in any other where a hormonal therapeutic agent is employed an adequate dosage is attained only when a biological end-result is achieved.

Case Reports

Total Addison's Disease

Case I.—F. K., female, age thirty-two years, first came under observation during her adolescent years. There was nothing unusual in her childhood. At the age of twenty she was operated upon for chronic appendicitis. The pelvis was explored but nothing abnormal noted. At the age of thirty (November, 1933) her Addisonian symptoms first appeared and were characterized by severe upper abdominal pain and nausea and vomiting over a period of four days. The nausea persisted. She was bedridden for four weeks and the myasthenia became progressively worse during this period. There was a weight loss of from 185 to 130 pounds. She was treated for probable acute abdominal condition though the complete gastro-intestinal x-ray was negative. Examination at this time showed moderate emaciation and diffuse generalized bronzing but with no particular accentuation except in the region of the vagina and rectum. Numerous jet black freckles were seen about the face and also in the membranes of the mouth and vagina.

Chest examination revealed some persistent crepitation in the left upper front and back and tenderness over the right kidney. Blood pressure, 90/70. Patient was then placed on 120 grains of sodium chloride daily with slight beneficial effect.

She was not seen until three months later when a call at the home was made. She was in a state of Addisonian shock and was admitted to the hospital. A daily dosage of 5 c.c. of eschatin (Parke, Davis and Company) brought about a good therapeutic response. At the time of discharge she was on a daily dosage of 2 c.c. This was reduced to 2 c.c. twice weekly. Sodium chloride was continued. Her weight was maintained between 105 and 110 pounds, and she was able to perform light household duties and walk a few blocks until December 11, 1934, when she exhibited signs of free fluid in the abdomen. Flat x-ray plates of her kidneys were negative for any abnormal shadow in the adrenal area. X-rays of her chest were also negative.

By February of 1935 the signs of free fluid in the abdomen disappeared. She was then placed upon 2 c.c. of adrenal cortex extract (Upjohn) three times a week. She was maintained on this dosage until October, 1935, when a febrile attack occurred characterized by temperature ranging from 101 to 103 with acute pleuritic pain in the right lower chest. Nothing abnormal was heard on auscultation. Pain persisted for three days and was febrile for seven days. Temperature fell by lysis. Her exhaustion, myasthenia, and gastro-intestinal symptoms suggested another Addisonian crisis. This persisted for two weeks. The dosage was increased to 3 c.c. twice daily without effect. At the end of the second week her symptoms were so aggravated that she was considered in extremis and the family so advised. She was then placed on 5 c.c. three times daily, and the therapeutic result was quite remarkable. She became comfortable and her strength rapidly returned. After a week on this dosage she was able to leave her bed, and it was decreased to 5 c.c. twice daily.

The patient was maintained on the above dosage until December 21, 1935, when she was seen in the office feeling comparatively well. On the twenty-fourth of December, three days later, following a hearty dinner she retired at 9:30 P. M. During the night she awakened complaining of mild discomfort in the abdomen. She immediately began to vomit and her vomiting was continuous. Both the husband and the mother remarked that the emesis far exceeded any possible intake she consumed that evening. In the period of one-half hour she vomited at least two to three quarts of clear fluid and she was apparently in extremis. The patient died four hours later.

Laboratory: Two blood counts were normal. Urinalyses were constantly normal except during two periods of vomiting the specimens revealed a slight acetonuria. The following isolated blood sugar determinations were run during comparative state of comfort: 71.4 mg. and 69 mg. per 100 c.c. blood. During a period of crisis when glucose was being administered intravenously the blood sugar was 131.0 mg. Blood nonprotein nitrogen studies were 25 mg. and 29 mg. per 100 c.c. blood. Basal metabolic rates were minus 22 and minus 29 per cent. Blood chlorides during time of crisis at the hospital were 386.0 mg. Blood pressure varied from 80 to 105 systolic and 65 to 80 diastolic.

Autopsy† revealed a bilateral pulmonary tuberculosis. Tuberculosis of both ovaries, tubes, and endometrium. Pan-abdominal tuberculosis with a

nutmeg liver. Tuberculosis pericholecystitis and perihepatitis. Tuberculous splenitis, nephritis, endometritis, salpingitis, and oöphoritis. The left adrenal showed complete cessation with calcification and the gland was a calcified body measuring 5 by 1.5 by 1 cm. Grayish white, chalky appearance and very friable. On both gross and microscopic examination no evidence of adrenal tissue was found. The right showed practically the same picture though a very small part of adrenal tissue could be recognized microscopically. This was infiltrated by pin-point tubercles.

Case 2.—H. A., male, age sixty-five years, was admitted to Herman Kiefer Hospital October 15, 1935. His chief complaints at that time were dyspnea and palpitation of two months' duration; nausea and vomiting for six months; anorexia, marked muscular weakness and loss of weight for twelve months; and cough for eighteen months. Two months previous to his admission he was seen at St. Joseph's Mercy Hospital. Because of the pronounced gastro-intestinal picture a complete gastro-intestinal study including x-ray was made to eliminate carcinoma of the stomach, which was negative. X-ray of the lungs at that time revealed a moderately advanced tuberculosis of a mixed type involving the upper half of the left lung which was verified at Herman Kiefer Hospital.

On physical examination one was struck by his marked myasthenia. It was difficult for him to cooperate in the necessary movements entailed in physical examination, such as sitting up. There was an increased pigmentation of the skin of the hands, wrists, heels, scrotum, neck, and the mucosa. He was immediately placed upon 3 c.c. of adrenal cortex extract (Upjohn) twice daily and 150 grains of sodium chloride enteric coated tablets daily with a marked therapeutic response. All gastro-intestinal symptoms disappeared within forty-eight hours. He regained an excellent appetite and his temperature, which had ranged from 99 to 100, remained within normal limits. At the expiration of one week he returned to his home under the observation of his physician and he remained essentially the same, definitely improved, but after two weeks failed to take his injections with recurrence of his former symptoms. He was then admitted to Herman Kiefer Hospital. On admission his temperature was 102.5. Left artificial pneumothorax was induced November 5, 1935, and has been maintained. In December of 1935 a pleural effusion developed. On October 24, 1935, he was started on 93 grains of sodium chloride daily. This resulted in no improvement and on October 30, 1935, adrenal cortex extract (Upjohn), 3 c.c. every other day, was initiated. This gave very little improvement and on November 11 the dosage was increased to 3 c.c. daily. The sodium chloride in enteric coated tablets was continued. The same initial improvement in his Addison's symptoms was then again noted and has been maintained to the present writing though there has been a progression of his pulmonary tuberculosis. From December 20 to 27 and the week following of January 4, 1936, no medication was available and there was a return of all his Addisonian symptoms which promptly responded to re-institution of the same dosage.

Laboratory: Consistently positive sputum for acid-fast bacilli. Normal findings in the urine. Kahn test was negative. The blood count showed red blood cells 3,150,000; white blood cells 6,700; hemoglobin, 61 per cent; and differential normal. Basal metabolic rate was a minus 5 per cent. Fasting blood sugar studies were 109 mg. and 94 mg. per 100 c.c. blood. Blood nonprotein nitrogen determinations were 28 mg. and 33 mg. per 100 c.c. blood. Blood chlorides were 437 mg. and 466 mg.

†Autopsy through the courtesy of Dr. D. G. Christopoulos, Pathologist, St. Joseph's Mercy Hospital.

Case 3.—P. A., male, aged thirty-eight years, was admitted to William H. Maybury Sanitarium July 24, 1935. He was complaining of extreme fatigue, loss of weight, and gastro-intestinal symptoms. In November of 1934 he was checked by a physician after having lost 15.0 pounds, and he was pronounced in sound health. He continued to work until April, 1935, when he complained of cold feet. The factory physician advised him to go home and to get a private physician. His complaints were diagnosed as gastritis and he was given some medicine to take. He then went to another physician who advised an operation for appendicitis because of the prominence of his gastro-intestinal symptomatology. Following this he went to the University Hospital of Ann Arbor, where diagnosis of pulmonary tuberculosis was made from the x-ray, which revealed the moderately advanced tuberculous process, mostly productive in type involving the upper third of both lungs with infiltrations showing greater density on the right. No cavitation was noted. All sputum examinations then and since have been negative. On June 25, 1935, left phrenic crushing was done. There had been a weight loss from normal of 170 to 180 pounds to 137 pounds.

Physical examination revealed a white male with presenile changes. There was generalized bronzing with accentuation of the face, neck, elbows, hands, scrotum, and anal region. Jet black moles were noted over the face and mucous membranes of the mouth particularly, though there were a few scattered over the entire body. Patient was seen at the time medication was withdrawn, and his myasthenia was most pronounced. It was extremely difficult for him to change his position in bed or even elevate his arms.

From September 21, 1935, to January 2, 1936, he received 1 c.c. of adrenal cortex extract (Upjohn) twice daily with definite subjective improvement. The hormone was then withdrawn and vomiting recurred after every meal. He felt very weak and apparently lost considerable weight. On January 9 the dosage was re-instituted at 3 c.c. plus 105 grains of sodium chloride in enteric coated tablets daily. There was definite improvement in his emesis though there was still considerable myasthenia. The dosage was then increased to 10 c.c. daily and the myasthenia was improved. He was able to move about in bed without any great apparent effort. The dosage was then decreased to 5 c.c. daily and so continued until it was determined that he did much better on 10 c.c. daily, at which time he was returned to the latter dosage for maintenance. The last report reveals that the patient is not entirely confined to bed.

Laboratory: Urine was normal. Blood count revealed red blood cells 3,760,000; white blood cells 9,400; hemoglobin 79 per cent; differential normal. Sputum was repeatedly negative for acid-fast bacilli. Blood chlorides were 240 mg.; 180 mg. and 233 mg. per 100 c.c. blood. Blood sugar was 77 mg. Blood nonprotein nitrogen determinations were 33 mg. and 41.5 mg. per 100 c.c. blood. Basal metabolic rates were minus 3.4 and minus 9 per cent. The blood gave a negative Kahn reaction but a positive four plus Wassermann reaction. Because of the positive Wassermann specific anti-luetic treatment was advised to determine the possible etiological factor, but this in no way altered the roentgen evidence of tuberculosis in the chest.

Discussion.—In Case 1 the unusual thing revealed at autopsy was the profound, generalized, tuberculous abdominal involvement which gave rise to practically no subjective symptoms though free fluid in the abdomen

twice during the course of her illness was suspected. In extremis she presented a marked water loss through vomiting. If any import can be attached to the history of the mother and husband the loss through this channel would exceed the intake in twenty-four hours by at least one gallon. At autopsy there was almost total lack of recognizable adrenal tissue. In Cases 1 and 3 there were no changes in pigmentation from the original. In Case 2 the patient had increased pigmentation of the hands, wrists, heels, scrotum, neck, and rectal mucosa, and at this time it is almost entirely cleared. At the present time it is noted that this man has had a total relief of all his Addisonian symptoms, but his general progress is hindered by a marked advance of his tuberculosis. There has been little, if any, effect upon the associated lowered blood pressure.

That there is a profound disturbance in sodium metabolism in this disease is evidenced by Case 3, the blood chlorides ranging from 180 mg. to 240 mg., the highest. There was no appreciable improvement in the blood chlorides of this patient despite the administration of enteric coated tablets of sodium chloride, but this can be explained on the basis that they passed through the gastro-intestinal tract unchanged. There was also a slight depression in the isolated blood chlorides in Case 1 during a crisis, being 386 mg.

Occasionally blood chemistry studies may be of diagnostic value, but in general the symptomatology is so outstanding that they can serve only as confirmatory evidence. However, studies along these lines tend to reveal a definite relationship between water, sodium, potassium, and nitrogen metabolism, and possibly vitamin C storage and metabolism. It is hoped that its clarification will extend the field of usefulness of this product.

Case Reports

Partial Adrenal Cortical Insufficiency

Case 1.—C. E., female, aged thirty-five years, was referred to St. Joseph's Mercy Hospital February 26, 1936. Chief complaints were complete exhaustion, pain in the lower left chest, and total alopecia. The latter occurred at the age of thirteen, and at the age of sixteen following measles there was a complete return of her hair. There have been partial returns of hair since.

Her exhaustion was first noted eight months previous to admission to the hospital. It became progressively worse and was brought on by physical exertion. In January complete exhaustion necessitated confinement to bed. The patient was treated with thyroid extract without any result

and then developed pain in her left chest which was aggravated by sitting up or lying on the left side. Gastro-intestinal symptoms consisted chiefly of lack of appetite.

Physical examination revealed a well developed, well nourished individual. No evident weight loss. Her exhaustion was quite real. Conversation or shifting in bed was an extreme effort. There were no pigmentary changes. Almost total loss of body hair including scalp, eyebrows and lashes, axillary, and pubic. Blood pressure, 110/80. Examination of the chest revealed a deformity which appeared to be due to an elevation of the body of the sternum.

Laboratory: Urine normal. Blood count revealed red blood cells 4,000,000; white blood cells 8,700; hemoglobin 75 per cent; differential normal. Blood sugar was 128.4 mg. per 100 c.c. blood. Blood chlorides were 571 mg. Blood nonprotein nitrogen was 27.3 mg. Blood calcium was 10.8 mg. Blood phosphorus was 3.4 mg. The blood gave a negative Wassermann reaction.

The patient was placed upon 5 c.c. of adrenal cortex extract and 150 grains of sodium chloride enteric coated tablets the first day of admission to the hospital with a marked therapeutic response. She was able to spend the larger portion of the following morning going through various laboratory procedures which necessitated transferring her from bed to a cart. At the end of five days she felt competent to make the trip to her home by automobile, a distance of 100 miles. Letters from both the patient and her physician three weeks later advised that she had made splendid progress and was able to attend to her household duties as well as to get around outside. A maintenance dose of 3 c.c. on alternate days was then advised with continuation of the sodium chloride. This progress has been maintained to date.

Case 2.—B. N., female, aged thirty-two years, was referred for examination October 24, 1935. Chief complaints were fatigability and sense of exhaustion. Fatigability had been present since high school days. She tired especially toward the end of the day but this had been definitely more acute and pronounced since childbirth. The first pregnancy resulted in a child who was approximately three years old at the time of examination. The second pregnancy was full term and resulted in a child who lived only a few hours. Post mortem revealed almost total lack of thyroid and adrenal tissue. In April of 1935 the patient was placed upon 2 c.c. of adrenal cortex extract (Upjohn) every other day, and on May 20, 1935, her physician notes the following: "Fatigability has been less than during any other time in recent years. This has been so reduced that it is not necessary for her to have a mid-day rest, which previously was indulged in daily. There has been a definite increase in appetite, and she is able to carry on her household and social duties normally, which formerly were a burden to her." Treatment was continued until the time of examination, October, 1935. At this time the third pregnancy was of two months' standing but terminated two weeks later in spontaneous abortion. Her symptoms became progressively worse and she was not able to get along without becoming extremely drowsy even though she took short periods of sleep throughout the day. There was a marked aggravation of fatigability.

Physical examination revealed a normally well nourished individual. No apparent weight loss. No pigmentary changes except normal freckling. Blood pressure readings varied from 100 to 110 systolic and 75 to 70 diastolic.

Laboratory: Urine normal. Blood count revealed red blood cells 4,080,000; white blood cells 10,200; hemoglobin, 82 per cent; differential normal. Blood

sugar was 118 mg. per 100 c.c. blood. Blood cholesterol was 150 mg. Blood nonprotein nitrogen was 26 mg. Kahn was negative. Basal metabolic rates were minus 11 and minus 14 per cent.

Adrenal cortex extract was advised, but there was an interval of several months immediately after the abortion during which it was not given. A report from her physician dated June 12, 1936, reveals the following: "During the time of withdrawal of medication the patient's symptoms of exhaustion and capricious appetite persisted, and her blood pressure was 90/70. Immediately upon resumption of cortical extract the fatigue lessened, appetite improved, and a gain of 3.0 pounds occurred. The gain in weight would probably have been greater had the patient indulged to a point of satiety but for esthetic reasons she has curbed her appetite. At this writing she is in her third month of pregnancy. The regular administration of 2 c.c. every other day keeps the patient in what would be called normal health and 'pep.' Should the extract be delayed twenty-four hours there is an obvious change in personality and physical well being."

Discussion.—One must be less dogmatic in the therapeutic and diagnostic discussion of partial adrenal insufficiency. In general, the outstanding symptomatology in both instances was a marked fatigability unrelieved by any previous form of medicament, although both displayed a relatively lowered blood pressure. Organic disease including tuberculosis was ruled out in so far as possible. Neither patient was of a neurotic type. There were no significant laboratory findings including blood chemistry. The response to treatment was apparently immediate and specific, permitting the two patients to be classified clinically as partial adrenal insufficiency.

In addition to the two cases above described this medicament was employed in four cases of prolonged post-influenzal prostration. In so far as could be observed it had no beneficial effect.

Summary

Three cases of total and two of partial adrenal insufficiency are reported, one total being confirmed by autopsy. A statistical etiological report is given. Employment of a commercial cortical extract apparently has altered the immediate prognosis. The recognition of milder forms of cortical hormone deficiency should greatly increase the field of usefulness of this type of extract.

We are greatly indebted to the following physicians for the reference, observation and care of the patients here reported: Drs. Orville Hastings, Joseph Egle, E. E. Mueller, and H. F. Brown of Detroit, and S. P. Huyck of Sunfield.

References

1. Kutz: *Proc. Soc. Exp. Biol. Med.*, 29:91, 1931.
2. Pfiffner, Swingle, and Vars: *Jour. Biol. Chem.*, 104: 701, 1934.
3. Susman, W.: *Endocrinology*, 20:383, 1936.

THE INTRA-OCULAR FOREIGN BODY PROBLEM

GEORGE C. KREUTZ, M.D.†

DETROIT, MICHIGAN

Much time, energy, and money are expended by industry and the medical profession in the treatment of major eye injuries, for, though methods of prevention are utilized to a marked degree in all modern plants, yet a surprisingly large number of intra-ocular foreign body cases come to the attention of the industrial ophthalmologist over a period of years. The subject is fraught with interest aside from its purely surgical aspects for if there ever was an infinitesimal injury that can result in a major economic tragedy to the afflicted one, it is this particular accident. One's whole life's economic ambitions can be seriously altered in the twinkling of an eye by an object so small as to almost defy detection by the naked eye. For obviously, in this day of unemployment, of efficiency, of high physical standards and rigid entrance examinations, the one-eyed worker finds steady employment a difficult task.

The treatment of intra-ocular foreign bodies might well be dated from Meyer's attempt to use the magnet in 1842 even though it was unsuccessful. For without the magnet, the end-results of surgery would be appalling if our present success with non-magnetic bodies is a criterion. Von Graefe, in 1845, removed an intra-ocular foreign body without the magnet but the eye was lost. In 1859, Dixon of London used the magnet successfully for the first time. In 1875, McKeown of Belfast removed a foreign body from the vitreous chamber by the posterior route and saved the globe. A striking advance in this field was Hirschberg's use of the electric magnet in 1879. He strongly favored the use of posterior route extraction technique and when Haab of Zurich, in 1892, developed the giant magnet and advocated the anterior route technique, the groundwork for the present day controversy between the anterior and posterior route proponents was well laid.

Other historical high lights are Roentgen's introduction of the x-ray in 1895; Van Duyne's application thereof in intra-ocular foreign body localization in 1896; Sweet's localizing technique in 1897; and his geometric method in 1910. With these major advances, the ophthalmologist has likewise taken full advantage of the many advances in asepsis, in surgical technique,

in local anesthesia, in shock therapy, and others.

In evaluating end-results in intra-ocular foreign body surgery, more than one viewpoint must be considered. It is well and good that a foreign body be successfully removed. But in our present highly organized competitive industrial system, the patient is interested in more than that a globe be saved; than that a good aphakic eye be obtained. He is primarily interested in the functional result obtained, and a function sufficiently acute to enable him to secure steady employment easily. Although there is no uniformity of opinion as to what constitutes industrial visual acuity, more and more industrial concerns are requiring visual acuity of 6-12 or better in each eye, with glass correction, if indicated, as necessary to pass entrance examinations for factory work. It is with this one major criterion in mind that a summary and evaluation of several series of intra-ocular foreign body cases, including our own experience, is presented below.

HAAB'S SERIES

(Quoted by Würdemann)⁸

Total Number of Cases.....	165
Foreign Body Removed.....	141
Useful Eye (Aphakia included).....	71
Enucleations and lingering cyclitis.....	48
Globe saved but useless.....	19

Note: It is difficult to evaluate this series by the criterion above stated, because "aphakic eyes" are not excluded from the "useful eye" classification.

HIRSCHBERG'S SERIES

(Quoted by Würdemann)⁸

Total Number of Cases with Foreign Body in the Vitreous Chamber or Retina.....	64
Useful visual acuity retained.....	36
Enucleated eyes.....	22
Useless eyes.....	6
Extraction Unsuccessful.....	4

Note: It is again difficult to evaluate this series because "useful visual acuity" again probably includes aphakic eyes which are not considered industrially useful at this time.

†Dr. Kreutz is a graduate of the University of Wisconsin, A.B. degree, 1921; Washington University Medical School, 1924, M.D. He is Surgeon-in-Charge of Otolaryngology at the Henry Ford Hospital.

SWEET'S SERIES

(Quoted by Würdemann)⁸

Total Number of Cases.....	395
Visual Acuity of 6/12 or better.....	44
Visual Acuity of 6/15 to 6/60.....	28
Light Perception and Projection.....	106
Globe Saved	17
Globe Lost	133
No Operation	67

Note: Forty-four (11 per cent) of this group would be eligible for modern industrial employment.

BARKAN AND BARKAN SERIES (1927)²

Total Number of Cases.....	49
Anterior Route Removal.....	24
Good visual acuity.....	21—88%
Enucleation	2
Posterior Route Removal.....	25
Good visual acuity.....	15—60%
Detachments	7
Enucleations	4

SPRATT'S SERIES (1930)⁵

Total Number of Cases.....	50
Anterior Chamber Cases.....	11
Good visual acuity.....	10
Vitreous Chamber Cases.....	39
Anterior Route Removal.....	12
Good visual acuity.....	5—42%
Posterior Route Removal.....	27
Good visual acuity.....	9—33%

ALLPORT'S SERIES (1928)¹

Total Number of Cases.....	202
Magnet Operation Successful.....	184
Enucleations	72
Posterior Route Removal.....	155
Industrial v/a	47—30%
Anterior Route Removal.....	47
Industrial v/a	21—44%

STIEREN'S SERIES (1932)⁶

Total Number of Cases.....	over 700
All removed by the posterior route	
Visual Acuity 20/20.....	5%
Visual Acuity 20/30 to 20/100.....	22%
Visual Acuity 20/120 to 20/200.....	26%
Visual Acuity 20/240 to Light Perception	32%
Enucleated at once.....	15%

HENRY FORD HOSPITAL SERIES NO. 1

(1918-1919)

Total Number of Cases.....	95
Anterior Route Removal.....	65
Industrial v/a	18
(13 anterior chamber)	
(5 posterior chamber)	
Poor v/a	4
Light Perception and Projection.....	4
Aphakia	24
Eviscerations	15

Note: Eighteen (28 per cent) obtained economically useful eyes. Twenty-four (37 per cent) obtained potentially useful but not economically useful eyes.

Posterior Route Removals.....	30
Industrially v/a	8
Poor v/a (6/30).....	2
Good aphakic eyes.....	5
Detached Retinæ	10
Eviscerations	5

Note: Eight (27 per cent) obtained economically useful eyes. Five (17 per cent) obtained potentially useful but not economically useful eyes.

HENRY FORD HOSPITAL SERIES NO. 2

(1929-1934)

Total Number of Cases.....	33
Anterior Route Removal.....	21
Industrial v/a	7
(5 Anterior chamber cases)	
(2 Posterior chamber cases)	
Good Aphakic Eyes.....	5
Light Perception and Projection.....	4
Eviscerations	5

Note: Seven (34 per cent) have economically useful eyes. Five (24 per cent) potentially useful but not economically useful eyes.

Posterior Route Removal.....	11
Industrial v/a	8
Poor v/a (6/30).....	1
Retinal Detachment	1
Eviscerated	1

Note: Eight (73 per cent) have economically useful eyes.

Whether the anterior or the posterior is the route of choice is a question which finds partisans on each side. Stieren, whose experience numbers hundreds of cases, strongly favors the posterior route. Allport¹ had as his maxim, "When the foreign body is anterior to the lens, use the anterior route, and when posterior to the lens, use the posterior route," and adds, "I have no question in my mind that these are the rules that should be obeyed." Verhoeff⁷ prefers the anterior route because of the danger of retinal detachment when the posterior route is used. Cross⁶ is "becoming more and more favorable to the anterior route as the one of selection."

Analyzing our own experiences in one hundred twenty-eight cases well studied and followed since 1918, it is our feeling that Allport's dictum is the logical one to follow. Particularly do we have this attitude since the work of Gonin on the treatment of detached retinae has become more widely used and its favorable results more frequently reported. The improvement in our second series (since 1929), we attribute to a somewhat radical change in our extraction technic. Formerly it was our custom to incise the sclera with the von Graefe knife as near the foreign body as possible, when necessary inserting a small thin bladed magnet tip into the vitreous chamber. We now trephine the sclera as near the foreign body as possible, remove the scleral button, and extract the body through the opening, introducing the magnet tip into the vitreous chamber when necessary. To prevent retinal detachment, Gonin's principle of sealing the retina and the choroid to the sclera is then applied. In our early cases, the actual cautery was used. More recently we

have used the electro-coagulating tips. We have employed this method in eleven cases and only one has resulted in a detachment. Several cases have been followed for more than four years since the method was first used by us on a patient in 1930. Stieren has followed a similar cauterizing technic for many years, using phenol in place of the actual cautery. The use of the trephine in lieu of the scleral incision was suggested to us by Dr. Don Campbell³ of Detroit who has used this method for many years with good results.

When one realizes that each intra-ocular foreign body case costs industry several thousands of dollars in surgical, hospital, and compensation fees, and further realizes that it costs a worker an inestimable amount through the loss of an eye plus the loss of employability which may extend through a lifetime of intermittent employment, it seems logical to present some working program which might guide the industrial surgeon and the industrialist in handling this important problem. We would suggest that

1. Visual acuity tests be made when an employee is hired or rehired.
2. Employees with poor visual acuity be allocated to non-dangerous jobs.
3. The use of goggles and other protective devices be further required.
4. Skillful first aid men be employed to differentiate major from minor eye injuries immediately after they are received.
5. X-rays and other diagnostic aids be used freely so that intra-ocular foreign body cases be diagnosed early.

6. Attempts at removal be made by skilled industrial ophthalmologists promptly.
7. Hospitalization be utilized freely and with it the beneficial results of shock and heat therapy.
8. Skillful prolonged after-care, even months after the foreign body has been removed, be required.
9. Employees be given protective work when returned to the job. The strain, exposure, et cetera, be avoided.
10. Refraction and corrective glasses be prescribed when needed.
11. Industrial surgeons, industrialists, and state and federal departments of industrial rehabilitation cooperate more closely in re-educating and placing men at work whose industrial visual acuity is not adequate to insure ease in securing employment.

My gratitude is expressed to Dr. E. L. Whitney, Surgeon-in-Charge of Ophthalmology at the Henry Ford Hospital, for the privilege of studying these cases, for his assistance and suggestions in handling foreign body cases, and for his criticism of the data compiled.

Bibliography

1. Allport, Frank: *Amer. Jour. Ophthalmol.*, 8:472-483, 1928.
2. Barkan and Barkan: *Amer. Jour. Ophthalmol.*, 10:919-921, 1927.
3. Campbell, Don M.: Personal communication.
4. Cross, George H.: Personal communication.
5. Spratt, Charles N.: *Amer. Jour. Ophthalmol.*, 13:1079, 1930.
6. Stieren, Edward: *Amer. Jour. Ophthalmol.*, p. 1121, (December) 1932.
7. Verhoeff, Frederick: *Amer. Jour. Ophthalmol.*, pp. 685-689, (August) 1932.
8. Würdemann: *Injuries of the Eye*—2nd edition.

Healing of the Newer Bumper Fractures of the Tibia

Walter G. Stern and Louis E. Papurt, Cleveland (*Journal A. M. A.*, Dec. 28, 1935), describe the newer type of bumper fracture as characterized by a severe comminution and splintering of the mid-third of both bones of the leg with many larger and smaller fragments, with long, linear fracture lines running up and down the tibia and, in the center of the comminution, a diamond or pyramid shaped fragment out of the cortex, usually on the anterior surface and often lying free from the rest of the fragments. The injury to the soft parts is usually severe and the fracture is often compound. Other types of injuries will occasionally produce the same characteristic features, such as injuries in mines from coal cars, falling rock and the like. The mechanism of this fracture-producing violence is rather similar to the direct violence of the bumper of an automobile. In their treatment primary reduction and fixation is carried out by the elected method for about eight weeks. After eight weeks the cast, if applied, is removed and a plaster mold of the leg

is made and measure taken for a walking brace reaching to the thigh, with lock joints at the knee. The plaster cast with walking iron or walking heel is reapplied. By this time usually sufficient fibrosis has taken place within the fracture area so that the leg is no longer flail and there is no danger of slipping of fragments. If this is not the case, the cast is reapplied and the patient is compelled to use his crutches for from four to six weeks longer. From the mold a model of the leg is made and a leather steel envelop brace with ring locks at the knee is constructed. This is form fitting and allows full weight bearing without any motion between fragments or any danger of angulation. The ordinary caliper brace is inefficient and does not completely immobilize the fragments. By this weight bearing and active function the circulation of the extremity is improved, muscle tone is reestablished and bone production is stimulated. There is a gradual deposit of lime in the callus with increasing fixation of the fragments until solid union finally takes place. These fractures are extremely slow in healing. The average healing time in a series of more than 100 cases was 6.2 months.

President's Page

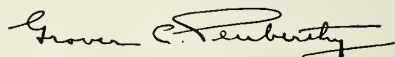
MEDICAL SOCIETIES

"Societies are the forum upon which observations are compared and tested, the school wherein is learned the changes and progress of diseases and the remedial agents valuable in their treatment, where intellect is matched against intellect and where the neophyte learns to express himself and take confidence in this demonstration before his fellows. They are the training school for public teachers and he who takes an active part in their growth and usefulness receives in return a facility of expression that enables him to speak with such confidence that will command attention."

SO declared Dr. William Brodie in his presidential address before the Wayne County Medical Society in 1886. Medical societies can and do fulfill all these functions. In some of the larger centers of population in the state, however, we appear to have too many medical meetings. Were one to attend all professional groups which he would be expected and entitled to attend, there would not be evenings enough in the week.

In view of the fact that the county medical society is the basic unit of medical organization, weekly or monthly meetings of the society, as the case may be, should be given every consideration. The hospital staff meeting, specialist groups, and other similar aggregations are important and deal more with clinical medicine in smaller groups. Should not more of this type of meeting be brought to the county society as all are within the county society? If too much time is devoted to these, the county society must suffer from lack of attendance and therefore interest. In some instances, such as hospital staff meetings, what is gained there, so far as a scientific program, may largely be duplicated in the county medical society.

In view of the urgent need for solidarity in the ranks of medicine, this can be accomplished only through constant attendance at the county medical society, which, in reality, includes the other groups to a great extent. What is said here applies particularly to the larger centers of population. The rural county has different problems to cope with.



President of the Michigan
State Medical Society

THE JOURNAL

OF THE

Michigan State Medical Society

PUBLICATION COMMITTEE

A. S. BRUNK, M.D., Chairman.....Detroit
 HOWARD H. CUMMINGS, M.D.....Ann Arbor
 J. EARL MCINTYRE, M.D.....Lansing

Editor

J. H. DEMPSTER, M.A., M.D.
 5761 Stanton Avenue, Detroit, Michigan

Medical Secretary

C. T. EKLUND, M.D.
 35 W. Huron Street, Pontiac, Michigan

Business Manager

Wm. J. BURNS, LL.B.
 2642 University Avenue, St. Paul, Minnesota
 or
 2020 Olds Tower, Lansing, Michigan

AUGUST, 1936

"Every man owes some of his time to the up-building of the profession to which he belongs."

—THEODORE ROOSEVELT.

EDITORIAL

MICHIGAN, A HEALTHFUL STATE

CLIMATE is a matter that most of us take for granted. Every year this state has among its distinguished visitors one who is very well known in the literary world, namely, William Lyon Phelps, professor of English at Yale University. Professor Phelps halted at Detroit late in June on his way to his summer home. A statement from a year-round resident of Michigan on the matter of climate might be open to discount on the grounds of self-interest. However, when an outsider will come almost a third of the distance across the continent year after year for an agreeable atmosphere and scenery, the case is different. Dr. Phelps is reported to have said during his recent bivouac in Detroit, that Michigan had the finest climate to be found anywhere in the United States.

That the state is one of the most healthful in the union is due doubtless in large part to its climate, though the watchful eye of the medical profession in sleuthing out possible dens of infection, as well as efforts of Michigan's Commissioner of Health and his co-workers, are, we think entitled to some credit. The state department of health has either eliminated or warned against the dan-

gers of the Old Swimming Hole. They have inaugurated a rigid inspection of the roadside water supply since 1925. Safety consists in heeding the warnings of the commission.

A long time ago, one or two million years ago, more or less, it doesn't matter, Michigan was visited by huge glaciers from the north. These glaciers had a mighty effect in modifying the land surface of the state. As a result, Michigan is the location of numerous fresh water lakes which, now that the ice age has long since disappeared, form a happy rendezvous for the sportsmen and fishermen.

In our northern regions, hay fever sufferers can live normal, comfortable lives during that part of the year when elsewhere their existence is rendered anything but comfortable. The good roads that course throughout the state, north, south, east and west, have tended to annihilate distance and have brought those natural resorts within easy access not only to the residents of Michigan, but to the pleasure seekers from all over the union.

DOES THE DOCTOR SHIFT HIS ECONOMIC BURDEN?

IN spite of the solvent condition of the treasury of Michigan, there is still a disposition on the part of those in control to feel that the state obligation is discharged if the hospitals are remunerated for the medical and surgical care of indigents. The doctor should give his services freely without any thought of remuneration. Many laymen think, if they have given any thought to the matter at all, that physicians on the staffs of hospitals are paid for their services. It is inconceivable to the average lay mind that anyone should work for nothing. But it does not go any farther; those not directly concerned are not interested.

The more business-like who have had occasion to employ physicians or surgeons and who have paid promptly for such services, feel that they bear the burden of physicians' so-called charity, on the assumption that no business could long stand such a drain on its resources. Business adds a certain percentage to the normal selling price of its commodity to make up for non-collectable debts.

The doctor, however, is not dealing in material commodities. He is rendering

services. The merchant who sells goods that are not paid for is that much poorer. If he disposes of an abnormally large quantity of goods and is not paid for them, he goes broke, perhaps beyond recovery. If, on the other hand, the physician renders services free of charge, he is not injured as a physician so long as he can procure the basic necessities of life, food, clothing, and shelter. He is, however, hampered in many ways, which all physicians realize to their great inconvenience. We have maintained that in the vast majority of instances, the physician does not soak the pay patient to make up for his losses in the care of the indigent. If medical fees are too high, the patient will either go without medical care or will defer it until he has jeopardized his chances of recovery. For the vast majority of illnesses the medical fees should not be considered burdensome considering the cost of other services rendered by non-professionally trained persons.

Even during the years preceding the depression, very few doctors could be considered affluent compared with those engaged in many other callings. Allowing eight hours for sleep, the doctor has had to learn how to live on sixteen hours a day. The only commodity he has to sell is his time. If a goodly portion is taken up in unremunerative work, his plight may be easily seen. He cannot, however, overcharge remunerative patients to make up his losses. He must bear it with as much fortitude as he can muster. The economic problems confronting the medical and dental professions today are proof that members of the two professions are carrying the charity load. If they could shift the burden of care of the indigent upon those who can and do pay them, doctors would have no economic problems.

Farmer (to new hired hand from the city)—Now, when you are attending to these mules, I warn you not to approach them from the rear without speaking to them first.

New Hired Hand—Why is that, is it a question of etiquette on the farm?

Farmer—No, it ain't a matter of etiquette a-taal. But one of them mules is liable most any time to kick you in the head, and I don't want any lame mules 'round here to wait on.

Nobody is quite so pompous as a man who has the idea that he must maintain a reputation as an authority or play the rôle of being intelligent.

GOVERNMENT PHILOSOPHY IN A SICK WORLD*

By *Walter Lippmann*

Plato's ideal ruler was the philosopher. Would the ideal statesman of the modern society be a physician?

* * *

I should like to discuss an aspect of the philosophy of government in a disordered world. Philosophy is perhaps too pretentious a name; what I have in mind is an attitude towards government which, when it becomes articulate and explicit may be dignified as a philosophy.

In the realm of government, whether a man is simply an interested citizen or an active politician, or a responsible official, or a student and thinker, the subject-matter is complex, it transcends his personal observation and experience, it comprises an extraordinarily large number of intricately related variable elements. In order to think about politics at all, in order to make public affairs comprehensible to the human mind, men have to create for themselves some kind of mental image, some sort of model, some hypothetical pattern which is simpler and more familiar than the reality which William James used to call the buzzing, blooming confusion of the actual world. It is beyond the power of ordinary minds—I am tempted to say that it is beyond the power of any mind—to deal continually and effectively with the data of experience in all their raw, heterogeneous fullness.

Survival of Fittest

At different times in the course of history, men have used different images to represent to themselves the social order in which they live. One of the oldest and most persistent of these images is derived from the patriarchal family; the relation between the ruler and his subjects is conceived as similar to that between the patriarch and his children. Then there is the image derived from war: the ruler's relation to his subjects is conceived as the relation between the chieftain and his warriors. This, incidentally, is a social image which has recently had a spectacular recurrence in the fascist states of Europe. Again and again, from the time of the Græco-Roman thinkers, men have at certain times conceived society as a body politic in which each class, each rank, was an essential member. Usually the current image has been an imitative reflection of the accepted or dominant science of the age. Thus, in the Eighteenth Century, the profound impression made upon men by the Newtonian conception of the physical world was carried over into politics, and men conceived the society as a system of forces. Our own constitutional system was devised by men who had the daring to conceive a federal republic in which the states would remain as distinct as the separate planets and as unified as the solar system. In the Nineteenth Century, the Darwinian imagery took possession of many political thinkers: economic competition and the imperialistic competition of national states were regarded as illustrations of the struggle for existence of a surplus population in an insufficient environment and of the survival of those most fitted to survive.

Now in our own day a different image has taken possession of many influential minds. Let us call it the image of the statesman as engineer. It is not hard to account for its popularity and persuasiveness. The most obvious triumphs of modern

*Delivered before the New York Academy of Medicine on December 19, 1935, and reprinted from the *Academy Bulletin* by special permission.

man, those which are most easily appreciated, are his great buildings, his great ships, his great machines, his great tunnels, dams, canals. Mankind has been profoundly impressed with the contrast between the efficiency of these engineering works as compared with the inefficiency of statesmen, of financiers, and of business men. The engineer, it seems, is able to achieve what he sets out to achieve. He can plan and he can carry out his plan. He knows what he is doing and he does it.

Social Engineers

So the idea took hold that society might be run by engineers, might be deliberately constructed according to a plan and then operated as efficiently as a great machine. When I was a young man, Mr. H. G. Wells was the prophet of this vision, and there were few in my generation who were not spellbound by the idea that if only we could get rid of politicians and of competitive business men and turn society over to the engineers, a clean, orderly, efficient and gracious civilization would be brought into being. This vision, if you will remember, played an immense part in the early enthusiasm for Mr. Hoover. Around 1920 he was hailed by many of us as the ideal ruler of men because he was not a politician but an engineer, though today, such is the changeableness of men, he is criticized precisely because he is not a politician. In the post-war era the image of the engineer seems to have taken hold not only of the best minds of the Republican Party in America, but of the best minds of the Communist Party in Russia. One of the chief reasons why Soviet Russia has exerted such attraction upon so many men is that the planned economy of Russia seemed to be an example, the first in history, of the application of engineering principles to human society. There were several years, I should say roughly from the crash of 1929 to the end of 1933, from the breakdown of prosperity to the beginning of recovery, when the ideal of an engineered and planned economy had almost completely captured the imagination of the Western World. Everyone who raised his voice talked about planning something, the Chamber of Commerce, the heads of big corporations as well as the New Dealers and the Progressives. No doubt they had different ideas of how to plan and what to plan for, but the underlying image dominated most minds. The notion finally reached its grand climax, and its *reductio ad absurdum*, in the vogue of technocracy.

The point I wish to make is that conception of government as a problem in engineering, is a false and misleading conception, that the image of the engineer is not a true image of a statesman, and that society cannot be planned and engineered as if it were a building, a machine or a ship. The reason why the engineering image is a bad image in politics, is a bad working model for political thought, is a bad pattern to have in mind when dealing with political issues, is a very simple one. The engineer deals with inanimate materials. The statesman deals with the behavior of persons.

A mode of thought appropriate to the organization of inanimate elements cannot be applied successfully to the organization of animate ones. It is as radical a misconception as would be the attempt to become an architect by studying music or a horticulturist by studying astronomy. The engineer who plans a building can calculate the weight which his steel will sustain; but he does not have to consider whether his girders and his bricks will renew their vitality from day to day and reproduce their kind from generation to generation. Nor does he have to consider whether they will be willing to hang together in the structure into which he has

put them, whether the girders, for example, will grow weary of supporting the bricks and begin to have purposes which he did not assign to them when he made his plan.

Biologic Analogy

Surely it is almost self-evident that if, as an instrument of political thinking, we must have a working image derived from some more familiar discipline, then it is to the biologic science that we must look for an analogy. Since the statesman deals with living things, he had better take his analogies and his inspiration from those who deal with living things, from farmers, and animal trainers, and teachers, and physicians rather than from astronomers, and engineers and architects. For analogies, images, working hypotheses, patterns, whatever you choose to call them, which come from man's dealings with the world of living organisms will at least have the virtue of keeping vividly in his mind a sense of what he is handling. Governing is an art. It requires, as all arts do, a sense of touch, an intuitive feeling for the material, a kind of sixth sense of how it will behave.

The masters of any profession know something more than it is possible to communicate; they are so sympathetically at one with their subject that instinctively they possess the nature of it. Before they have reasoned consciously, they have smelt, have felt, have perceived what it is and what to do. It used to be said that you did not have to be in the ring with Jack Dempsey for fifteen rounds in order to learn that he was a champion. Likewise, the master of a subject, whether he is a carpenter or the rider of a horse, a diagnostician, or a surgeon, will quickly disclose in the inevitable emergencies of any human activity whether he possesses that intimate feeling, that flair, that uncalculated aptitude which distinguishes the first-rater from the second-rater.

Now among public affairs as elsewhere, since everything cannot be reasoned out a priori in each emergency, it is of the utmost importance that the political tradition of a country should predispose men toward a true and reliable sense of how living men in a living society behave. That is why the dominant imagery is so important.

The image of a planned and engineered society has the effect, I believe, of destroying the intuitive feeling for what society actually is and of the sense of touch in dealing with human affairs. The grosser consequences of it are evident enough; in the supreme impertinence with which communist and fascist states treat human beings as if they were animate materials to be fabricated by the dictators; in the ruthlessness with which they cut human nature to the shape they desire and nail together in designs of their own the living spirits of men. This notion that society can be engineered, planned, fabricated as if men were inanimate materials becomes in its extremist manifestations a monstrous blasphemy against life itself. It can also take milder forms which merely produce temporary confusion and inconvenience as in the fantastic attempts, now happily concluded, to write in three or four months some five hundred codes for the detailed conduct of all business throughout continental America.

The man who approaches public life with a feeling for living organisms will not fall into the illusion of thinking he can plan or fabricate or engineer a human society. He will have the more modest aim of defending it against the invasion of its enemies and of assisting it to maintain its own balance.

Remembering that a society is an association of living persons, and not an arrangement of inanimate materials, he will never imagine that he can impose upon those living persons and their descendants

his private preferences. He will recognize that the function of government is not to decide how men shall live, what kind of men they shall be, what they shall spend their energies upon. Government cannot direct the life of a society. Government cannot shape the destiny of the human race.

Drastic Medicine

There are some who think that government should use all its powers of coercion to make the social order correspond with their own ideal of the nobler and more satisfying social order. But this is as if a doctor dealt with a patient on the assumption that he must use drastic medicine if he finds that his patient is not as strong as Hercules, as beautiful as Apollo, and as wise as Zeus. He would be an absurd doctor. The sound physician, I take it, is not attempting to make a superman out of his patient. He takes measures to protect him against the invasion of hostile bodies. He cultivates habits which improve his resistance. He intervenes with medicines and surgery when he thinks he can assist the patient in recovering his own equilibrium. Always, if I understand the faith of the physician, he regards himself not as a creator, designer, and dictator of the nature of man, but as the servant and the ally of nature. There are times to be sure, when his patient is prostrate and the doctor must be the master of his whole régime. But even in these times, the good doctor will be continually seeking for ways, not to make a new man of his patient, but to encourage those recuperative powers which may at last enable the patient to walk again on his own feet.

There is a vast difference between those who, as engineers dealing with inanimate materials, can dictate to nature and those who, as physicians dealing with living organisms, must respect nature and assist her. My thesis is that statesmen had better think of themselves as physicians who assist society than as engineers who plan and fabricate it. They will understand these problems better if they realize that society has not been invented or constructed by any man or any set of men but is in fact the result of the infinitely complex adaptations by innumerable persons through countless generations. Its destiny is beyond the power of the human mind to imagine it. Its reality is complex beyond the mind's power to grasp it. Its energies are beyond the power of any men to direct it. Society can be defended. Its adjustments can be facilitated. Its various purposes can be clarified, enlightened, and accommodated. Its aches and pains can in some measure be relieved. But society is not and never will be a machine that can be designed, can be assembled, can be operated by those who happen to sit in the seats of authority.

To know this, to realize the ultimate limitations of government, and to abide by them, is to have that necessary humility which, though for the moment it is at a discount in many parts of the globe is, nevertheless, the beginning of wisdom. Without it men will use political power for ends that government cannot realize, and in the vanity of their delusions fall into all manner of cruelty, disorder, and waste. They will have forgotten to respect the nature of living things, and in their ambition to be as gods among men they will affront the living God. They will not have learned that those who would be more than human end by being less than human.

The time of the year is here when people who wouldn't think of eating with a fly on their table will go on a picnic and eat a meal in the presence of a thousand flies, to say nothing of the ants, gnats, chiggers, bugs, and varied other flying insects and crawling critters.

A GRASS DIET

A native of Yugoslavia, who is alleged to have celebrated his one hundred and fifth birthday, claims that his advanced age is due to a life-long habit of eating grass. He gathers it and cooks it and sometimes eats it raw. The *Manchester Guardian* poet has seized upon the incident and has delivered the following:

Would you like to know how to keep youthful,
Defying the years as they pass?
Take a tip from a chap who is truthful,
And try eating grass.

Some people say "Shun beer and baccy,
And husband your health and your brass."
But that is a creed for a lackey—
The hero eats grass.

It is good for the ancients who dodder,
It is good for the lad and the lass;
I tell you, as health-giving fodder,
There's nothing like grass.

You can gobble it green as a salad,
Or boiled to a spinach-like mass;
There is room for a boost or a ballad
In favor of grass.

Get down to it, laddie, and chew it,
You copy the ox and the ass;
If Nebuchadnezzar could do it,
Well, what's wrong with grass?

Away with that boosted Hay Diet,
For hay's in a different class;
Insist on the best and run riot
Turned out to pure grass!

THE CADUCEUS OR THE STAFF OF ÆSCULAPIUS

Wisdom, Healing, Cunning, Health, Swiftmess, Religion are things which most of us strive for.

Many of us look upon "The Caduceus" with a rather tolerant air, because after all "we may be children" and perhaps we regard this new toy of ours as a form of plaything, an advertisement or at the most a disk on the front of our car as a traffic signal.

"The Caduceus" signifies all that I quoted in the first paragraph. The double winged twisted serpent staff is as old as history. In Genesis, the serpent was cunning and subtle. Who needs cunning, if not the physician? In Exodus, the brazen serpent was a healing agent. Egyptians worshipped serpents. Symbolic here of faith, one *must* have faith in one's physician. Again a serpent had a thalic significance; it is the emblem of life. Who brings life into the World?

The wings are symbolic of Horus, the "God of the Sun," who dispersed light, health and life.

The origin of the staff is indefinite, but the sick and aged lean upon the staff who is the physician.

It is also the staff of the Great Mother, the "Great Giver of Life," Uas Staff.

The Staff of Æsculapius has only one serpent and perhaps is a better symbol than "The Caduceus" or the Staff of Hermes, who was noted for speed, swiftmess or as a messenger, but many authorities claim that this was another instance of the so-called Greek Culture using Egyptian Art and claiming it as their own.

Therefore, one can see that our emblem signifies the glorious traditions in history as old as the earth and a future without bounds.

W. G. G. in *Mercy Hospital News*, Bay City.



The Editor's Easy Chair

BEWARE THE GREEKS BEARING GIFTS

In the matter of group hospital insurance the only thing in its favor is the fact that hospital expense can be liquidated at a minimum cost to the insured patient, leaving him able to meet the cost of medical care (that is, the doctor's part in it) sooner and with greater ease than if he were to pay his hospital independently. Ten or twelve dollars a year in group hospital insurance is not burdensome to any employed person no matter how low his income. The hospital is assured of hospital costs on the prepayment plan. The patient is free to concentrate on the doctor's fee. Fine!

* * *

Once upon a time, so the story runs, a camel called on an Arab but could get only his head into the Arab's tent. The camel persisted, however, until he was able to insinuate his entire body into the tent and the Arab was forced to seek an exit through the back door. May not hospital insurance be the entering wedge of health insurance? If hospitalization can be made so financially attractive, it is only a short step to include the laboratory specialties, x-ray and clinical laboratories, and then, why not include obstetrics? Then surgery and medicine? The plan wherever put into operation is concerned only with employed persons. The unemployed or indigent sick will still be left for the medical profession. Any altruistic plan should be applied first to the indigent rather than to employed persons.

* * *

Under the group hospital insurance periodic prepayment plan for the purchase of hospital care, the patient may have his choice of physician and may be hospitalized only on the advice and request of his physician. If, however, his physician happens not to be on the staff of the particular hospital or hospitals concerned in the group hospitalization plan, the patient's loyalty to his private physician will be strained to

the breaking point. The patient will doubtless select the hospital which he has already prepaid, which circumstance will involve severing relations with his family physician and accepting a physician on the staff of the hospital participating in group insurance. This is an immediate objection to it.

* * *

Hospital insurance, of course, is a matter of arrangement between the hospital either singly or as groups with definite groups of employed persons. The hospital and the group are factors primarily interested in the arrangement. The doctor is not a negotiating factor. The matter of hospital insurance is far beyond the experimental stage. The principle has been adopted in various centers all over the continent. The clearest statement that we have seen is the study made by the Canadian Medical Association, embodied in a brochure of fifty pages. Since it has been a matter, as stated, between the hospitals and the insured groups, the medical profession has not been as well informed beforehand as it should be regarding the merits and demerits of the plan. As we have intimated, a great deal can be said on both sides; that is, for and against hospital insurance. The short range view (speaking from the medical viewpoint) appears promising; the distant view is fraught with possible pitfalls.

* * *

To digress for a moment. The past decade or two have witnessed the development of what has been termed the totalitarian state as exemplified in Italy, Germany, Soviet Russia and Turkey, and to a less degree elsewhere. The beginnings of these movements appear to be in the interests of body politic. Fascism, Nazism and Sovietism began in a small way in the activities of small groups convinced that they alone knew the solution of their respective political, economic and social problems. Their course has resulted in eliminating almost entirely individual freedom. The charge that has been made against health insurance, or sickness insurance as the case may be, is that it tends to cramp the freedom of the practicing physician. There is no question of this. Medicine has declined both as a science and as an art where it has been subjected to regimentation in the totalitarian state. As we have already mentioned, group hospital insurance may seem so palatable to the patient, to the hospital, and to the doctor who

is fortunate enough to be connected with a hospital under the group plan, that other things may be eventually thrown in for good measure, probably at a moderate additional fee. We mean all laboratory work, much of which is now performed independently by private specialists in these branches, then gradually such departments of medical care as surgery and all its branches as well as internal medicine and its various specialties. This would, of course, be complete health insurance. It would mean organization and regimentation of the entire medical profession; no, not the entire profession, but just so many members as would be required to take care of the employed worker under a business arrangement. As we have said repeatedly, the organization of medicine on the basis of efficiency would eliminate a large number of doctors who as private practitioners are in a position to live as independent citizens. We noted some time ago that, according to a survey made in Canada, organization and regimentation of the profession would enable 50 per cent of the number now licensed to practice to care for the entire number of afflicted persons.

The long range view then does not appear so promising.

* * *

The scheme appears to be feasible in mining and other segregated districts. To apply it in the industrial centers appears to us an insidious attempt to make palatable the idea of general health insurance. We advise that the profession become thoroughly familiar with the operation of group hospital insurance on the periodic prepayment plan in other places before committing themselves.

"Let us rather bear the ills we have
Than fly to others that we know not of."

The Bone Marrow

R. H. Jaffé, Chicago (*Journal A. M. A.*, July 11, 1936), asserts that the improvement in the technic of biopsies of the bone marrow has added a valuable method to the diagnostic laboratory procedures to which the clinician can resort in the cases in which the examination of the peripheral blood fails to give definite information. The importance of the examination of the bone marrow *in vivo* becomes evident if one considers the fact that the circulating blood does not always reflect the condition of the bone marrow. Great differences exist sometimes between the cellular content of the blood and that of the bone marrow which may be the sources of diagnostic errors. Since the biopsy of the bone marrow is expected to become widely used in clinical medicine, he presents a brief discussion of the normal bone marrow and of the changes that are observed in some of the important disturbances of blood formation.

Critical Analysis of Heart Disease Mortality

O. F. Hedley, Philadelphia (*Journal A. M. A.*, Nov. 2, 1935), is of the opinion that the present method of reporting and tabulating heart disease mortality statistics does not reflect a true picture of heart disease mortality. Only 80 per cent of deaths occurring in hospitals in a large city and tabulated for the purpose of vital statistics as due to heart disease were found on examination of the hospital records to be due to that cause, while only 62 per cent of deaths due to heart disease were so officially recorded. It is not possible to obtain an accurate conception of the total number of deaths from heart disease or of any of the various etiologic types. Within certain limits, the more accurately heart disease is diagnosed the less reliable are the official mortality statistics. This is due to the difficulties in interpreting diagnoses made along etiologic lines in terms of the International List of Causes of Death. It is quite likely that with further advances in clinical medicine, these points of view will become more divergent and vital statistics even more unreliable. It is proposed that heart diseases, when reported along etiologic lines, shall be tabulated as subtitles under the respective etiologic categories. Consideration should be given toward eventually revising the International List of Causes of Death so that heart disease mortality may be officially recorded on an etiologic basis. Physicians are urged to use etiologic diagnoses in reporting heart disease mortality. Registrars of vital statistics should be most loath in questioning death certificates containing approved clinical terms. It should be recognized by practicing physicians, coroners and statistical officials that the employment of superficially accurate diagnosis based on insufficient evidence results only in the vitiation of mortality statistics in general. Many diagnoses of heart disease are made without sufficient evidence. While the use of an etiologic terminology is not suggested as a panacea for intentional misstatements, it is believed that fewer mistakes are made when heart disease is diagnosed in terms of its causative factors.

Gonorrheal Vaginitis: Results of Treatment with Different Preparations and Amounts of Estrogenic Substance

In treating gonorrheal vaginitis, Robert M. Lewis, New Haven, Conn., and Eleanor L. Adler, New York (*Journal A.M.A.*, June 13, 1936), found that estrogenic substance in ethylene glycol given hypodermically was relatively effective when used in large doses: 2,400 international units daily. Eight hundred international units daily proved disappointing. The use of vaginal estrogenic suppositories (originally 600 international units and later 1,000) proved very effective. Clinical improvement, cessation or great diminution of discharge is nearly always noted after from fourteen to eighteen days of treatment. The administration of estrogenic substance changes the reaction of the vaginal secretions from neutral or alkaline to acid. This, the authors believe, is the major factor in eliminating the gonococcal infection. The acidity of the vaginal secretions is easily measured and provides a sure guide by which one can determine whether or not dosage is adequate. Of thirty-three consecutive cases of gonorrheal vaginitis in children treated with estrogenic suppositories, thirty yielded negative smears in an average of 20.7 days. Two required twelve weeks of treatment. Five cases are listed as recurrences. No ill effects were encountered. The method is safe and harmless, and the most effective method known for the treatment of gonorrheal vaginitis in children.

Postgraduate Extension Courses for 1936

given by the Department of Postgraduate Medicine,
University of Michigan, and the Michigan State
Medical Society, beginning the first week in October
and continuing eight weeks in the following centers:

Grand Rapids
Battle Creek--Kalamazoo, jointly
Lansing--Jackson, jointly
Flint
Bay City
Traverse City--Cadillac--Manistee, jointly

A composite of the course will be given in October
at Marquette, Houghton, or Escanaba.

MORNING

Clinical Pathological Conference. Clinical
Course and Pathology of Circulatory Disease.
Two Illustrative Cases.

- (a) The Basis for Allergy in Man.
- (b) The Diagnostic Criteria of Allergic Disease and a Consideration of the Practical Specific Management.

The Common Psychoneuroses in Adults and Children. The Evaluation of History and Signs. The Manifestations in the Organs. Treatment.

- (a) Appendicitis. A Consideration of the Problems Involved in the Increasing Death Rate from this Disease.
- (b) Differential Diagnosis of Diseases of the Breast.

The place of the x-ray in the Diagnosis of Gastro-Intestinal Disease.

Malposition of the Uterus. The Importance of Clinical Manifestations. Diagnosis and Treatment.

Fungous and Allied Infections of Skin. Tinea Infections. Trichophytids, Tinea versicolor. Erythrasma. Blastomycosis. Coccidioidal Granuloma, Etc.

Recognition and Management of Acute and Chronic Disease of the Ear.

AFTERNOON

The Differential Diagnosis and Management of Coronary Disease. Progressive Coronary Occlusion. Angina Pectoris.

- (a) Allergic Diseases. Sensitization dermatitis. Contact dermatitis. Urticaria.
- (b) The Common Skin Manifestations of Allergy.
The Skin in Immunity and Allergy.

Acute Lobar Pneumonia. A Discussion of Specific Methods of Treatment. A Consideration of Sera and Vaccines. Recognition of Complications.

Care of the Injured Person, Including the Recognition and Emergency Care of Fractures.

Ulcerative Lesions of Gastro-Intestinal Tract. Esophagus. Peptic Ulcer. Ulcerative Colitis. Newer Methods of Treatment.

Management of Post-partum Infection. Diagnosis of Mild Cases. Course of the Infection, Prognosis, Prevention and Treatment.

Urinary Tract Obstructions: Urethral, Prostatic, Bladder Lesions, Ureteral Lesions. Symptoms, Diagnosis and Management.

The Diagnosis and Practical Management of the more Common Diseases and Injuries of the Eye. The Conjunctiva. Squint. Foreign Bodies. Glaucoma.

DEPARTMENT OF SOCIETY ACTIVITY

C. T. EKLUND, M.D., Secretary

COUNCIL CHAIRMAN'S COMMUNICATION

THE Governor's Executive Order of June 4, making the filter system official, plus the action of the State Administrative Board of July 21 reinstating Schedules A, B, C and D, will be tests of the filter system! Coöperation of the highest type by physicians, probate judges, and hospitals is required to make successful the program recommended to state officials on October 30, 1935.

The economic investigation must be airtight; the medical examination of the patient, stripped, must be scrupulous. It is the duty of physicians, by contact and activity with probate judges, to see that the commitments are kept at a minimum, consistent with necessary medical care to the people; if the load increases unduly, the chiseler may procure service at the expense of the worthy, and the deficit may become so large as to discredit the work of the medical profession.

Our responsibility as physicians is to take care of the sick and to help solve the medical problems of our community. If filter boards refuse tax-supported medical care to people because of their economic ability to pay, these patients must be referred to their family physicians, without fail, so that they may procure the required service and be accorded the chance to pay on a post-payment basis, if necessary. Physicians must be ready to place their services at the disposal of all.

HENRY COOK, M.D.

A REAL HONOR ROLL

THE growing popularity of the Post-Graduate movement can not be better attested than by a consideration of the number of physicians and surgeons who have availed themselves of the opportunities afforded by this movement on the part of the University and the Michigan State Medical Society. Herewith appear the names and addresses of those doctors who have attended the courses given during the first half of 1936.

Ophthalmology and Otolaryngology.—Drs. Gordon H. Bahlman, Flint; Clarence Baker, Detroit; Charles S. Ballard, Detroit; Emerson M. Blake, Columbus, Ohio; Earl Bloomer, Dearborn; D. H. Boyce, Escanaba; George H. Boyce, Iron Mountain; Frederick J. Cady, Saginaw; Leland F. Carter, Detroit; Wayne A. Cochrane, Jackson; George V. Conover, Flint; William S. Conway, Petoskey; A. J. Cortopassi, Saginaw; Harold Criswell, Bay City; Gerald F. Denyes, Toledo, Ohio; Ralph G. Ferris, Birmingham; Laslo Galdonyi, Detroit; Roll O. Grigsby, Ashland, Wis.; William J. Harrington, Appleton, Wis.; Don V. Hargrave, Eaton Rapids; Benjamin G. Holtom, Battle Creek; Don M. Howell, Alma; William S. Jones, Menominee; Thomas F. Keating, Detroit; Mana Kessler, Bay City; W. J. Kibler, Tonawanda, N. Y.; R. Lee Laird, Highland Park; Victor R. Lapp, Hamilton, Ont.; Edmund O. Leahy, Jackson; B. E. Leatherman, Toledo, Ohio; Lee A. Lewis, Manistee; Maurice C. Loree, Lansing; John A. Lukens, Toledo, Ohio; Clifford B. Mandeville, Muskegon; Fred W. McAfee, Detroit; Arthur McArthur, Flint; Lester McCullough, Detroit; John J. McDermott, Benton Harbor; William E. McGarvey, Jackson; A. R. McKinney, Saginaw; Wm. E. Miller, South Bend, Ind.; George F. Moore, Mt. Clemens; Ray E. Newton, Jackson; Leonard Nippe, Toledo, Ohio; Charles T. Pankhurst, Ionia; Harold E. Ray, Xenia, Ohio; Louis Reik, Eloise; Harvey B. Searcy, Tuscaloosa, Ala.; DeWitt L. Sherwood, Detroit; Alon W. Shewman, New Castle, Pa.; John C. Smith, Jackson; Emory Stein, Eloise; Paul J. Stueber, Lima, Ohio; William G. Symon, Garrett, Indiana; Robert A. Weber, Mitchell, S. Dakota; Herbert O. Westervelt, Benton Harbor; Herbert T. White, Flint; Edward P. Wilbur, Kalamazoo; George E. Winter, Jackson; William P. Woodworth, Detroit; Russell H. Strange, Mt. Pleasant; Clayton T. Stubbs, Detroit; J. N. Sutherland, Detroit.

Proctology.—Drs. N. S. Banker, Cleveland Ohio; O. H. Baumes, Cincinnati, Ohio; Fred Beekel, Cleveland, O.; Nils O. Byland, Battle Creek; Haviland Carr, Covington, Ky.; Peter H. Darpin, Detroit; George W. DeMuth, Defiance, Ohio; S. E. DeMuth, Defiance, Ohio; J. W. Edwards, Ferndale; Howard D. Giles, Columbus, Ohio; Stephen Graczyk, Buffalo, N. Y.; Dean W. Hart, St. Johns; J. F. Heffernan, Carleton; Louis Hromadko, Detroit; J. W. Hutchens, Portsmouth, Ohio; H. C. Kling, Niles; D. A. Levine, Iron River; C. G. Mackey, Culver, Ind.; James W. MacMeekin, Saginaw; Vincent S. Mancuso, Detroit; Mark M. Marks, New York City; Pedro O. Martinez, Detroit; Arthur A. McNabb, Lawrence; Paul Medema, Muskegon; J. J. Michalak, Humboldt, Kans.; C. L. A. Oden, Muskegon; John H. Oyer, Angola, Ind.; C. H. Playfair, Hamilton,

Ont.; George N. Rinehart, Toledo, Ohio; Morris Schaner, Toledo, Ohio; R. W. Shook, Kalamazoo; A. B. Simonson, Elsie; R. N. Slate, Detroit; R. A. Springer, Centreville; Milton Strawbridge, Toledo, Ohio; L. F. Thalner, Jackson; Frank A. Votey, Grand Rapids; R. S. Waterson, Niles; M. Wertenberger, Jackson.

Genito-Urinary Diseases.—Drs. Eugene S. Brown-ing, Grand Rapids; C. A. Cetlinski, Detroit; Peter H. Darpin, Detroit; George W. DeMuth, Defiance, Ohio; John W. Edwards, Detroit; Howard Giles, Columbus, Ohio; Leonard A. Glenn, Chatham, Ont.; Dean W. Hart, St. Johns; Herbert C. Kling, Niles; David A. Levine, Iron River; Vincent S. Mancuso, Detroit; Pedro O. Martinez, Detroit; Howard H. McNeill, Pontiac; Joseph J. Michalak, Humboldt, Kans.; Alton B. Simonson, Elsie; Russell A. Springer, Centreville; Harry Van Heldorf, Detroit.

Gynecology, Obstetrics and Gynecological Pathology.—Drs. Walter Belser, Ann Arbor; Peter L. Boyle, Youngstown, Ohio; Henry E. Thompson, Detroit; Perry P. Burnstine, Detroit; C. H. Carruthers, Florence; C. P. Clark, Flint; C. G. Constable, Detroit; Peter H. Darpin, Detroit; J. W. Edwards, (Detroit) Ferndale; Edwin O. Foss, Muskegon; Norman K. H'Amada, Detroit; Joseph E. Isaacs, Detroit; Marie Keilin, Muskegon; Saba Kessler, Bay City; Earl F. Lutz, Detroit; Elta Mason, Flint; Usher H. Meyer, Erie, Pa.; H. A. Miller, Lansing; O. W. Mitton, East Tawas; M. J. Murphy, Grand Rapids; James B. Nelson, Youngstown, Ohio; A. Noordewier, Grand Rapids; Clarence E. Toshach, Saginaw.

General Medicine.—Drs. Nelson Abbott, Marshall; C. A. Alexander, Kalamazoo; Joseph A. Bakst, Detroit; C. H. Carruthers, Florence, Ont.; Peter H. Darpin, Detroit; Fred J. Drolett, Lansing; David H. Fauman, Detroit; John Gates, Ann Arbor; Neil Gates, Ann Arbor; J. A. Graham, Detroit; C. L. Hodge, Reading; Bert H. Honeywell, Ann Arbor; J. C. Isaacs, Detroit; T. G. Kane, Muskegon; E. M. Kilpatrick, Columbus, Ohio; J. G. Kirker, Detroit; Wm. Klein, Detroit; David Kliger, Detroit; M. E. Kohn, Detroit; Earl F. Lutz, Detroit; Pedro Martinez, Detroit; Elta Mason, Flint; J. P. McConkie, Birmingham; Howard H. McNeill, Pontiac; E. D. Merritt, Detroit; Harry C. Metzger, Detroit; Russell Palmer, St. James; B. R. Parker, Detroit; A. W. Petersohn, Battle Creek; Emmett M. Pettis, Muskegon; A. C. Roche, Calumet; Morris Schaner, Toledo, Ohio; Sadie Thumin, Detroit; Mildred C. Williams, Detroit; J. J. Woods, Ypsilanti.

THEY ARE DOING YOUR JOB!

ON July 8 the thermometer in Detroit registered 105°. The pavements fanned diabolic blasts at motorists and pedestrians, but seventeen stalwarts braved these infernal rigors and at a sacrifice of comfort, valuable time and expense, came to Detroit from various distances, great and small, to

attend a meeting of the State Society Public Relations Committee to discuss the important question of distribution of medical care to the borderline group.

Dr. Roy H. Holmes of Muskegon traveled the greatest distance, 380 miles; Dr. A. V. Wenger of Grand Rapids, 298 miles; Dr. F. T. Andrews of Kalamazoo, 280 miles; Dr. L. Fernald Foster and Dr. Paul R. Urmston of Bay City, 210 miles; Dr. L. C. Harvie of Saginaw, 180 miles; Dr. Henry Cook and Dr. F. B. Miner of Flint, 116 miles; Dr. C. T. Ekelund of Pontiac, 50 miles; and Dr. T. K. Gruber of Eloise, 25 miles. Detroit physicians who gave up the evening to attend the session at the W.C.M.S. Building were Dr. F. B. Burke, Dr. J. H. Dempster, Dr. L. O. Geib, Dr. H. A. Luce, Dr. R. H. Pino, Dr. Frank H. Purcell, and Dr. J. M. Robb.

To repeat, these physicians sacrificed their time and convenience to bring to the Michigan State Medical Society helpful advice on a problem whose solution is the responsibility of you, and you, and every practicing physician. You owe these men (and the other workers on the twenty-seven State Society committees who are spending much of their time and effort on the important affairs of Medicine) your gratitude and thanks. Actually, they are doing *your* job.

COUNCIL AND COMMITTEE MEETINGS

1. **June 23, 1936**—Subcommittee of Special Contact Committee to Governmental Agencies—Probate Court, Flint—9:00 A. M.
2. **July 8, 1936**—Executive Committee of The Council, plus the Public Relations Committee and the Medical Economics Committee—Wayne County Medical Society Building, Detroit—6:00 P. M.
3. **July 9, 1936**—Liaison Committee with State Bar of Michigan—Board Room, Olds Tower, Lansing—2:00 P. M.
4. **July 12, 1936**—Maternal Health Committee—Olds Hotel, Lansing—10:00 A. M.
5. **July 12, 1936**—House of Delegates' Medico-Legal Study Committee—Pantlind Hotel, Grand Rapids—2:30 P. M.
6. **July 15, 1936**—Contact Committee with Michigan Crippled Children Committee—Olds Hotel, Lansing—1:30 P. M.
7. **July 20, 1936**—Special Contact Committee to Governmental Agencies; meeting with Finance Committee of State Administrative Board, State Auditor General's Office, Lansing—10:00 A. M.
8. **July 22, 1936**—Liaison Committee with Michigan Hospital Association, Olds Hotel, Lansing—6:30 P. M.
9. **July 29, 1936**—Executive Committee of the Council, and the Legislative Committee—Statler Hotel, Detroit—3:00 P. M.

MINUTES OF MEETING OF MATERNAL HEALTH COMMITTEE

March 7, 1936

The meeting was called to order in Ann Arbor by Dr. Norman F. Miller, for the purpose of considering advisability of attempting a state survey on obstetric practice. Those present were Drs. Norman F. Miller, Ann Arbor; Ward F. Seeley, Detroit; H. W. Wiley, Lansing; H. A. Furlong, Pontiac; also Dr. Nathan Sinai was present by request. Absent: Drs. Campbell and Toshach.

Dr. Sinai explained the present study being made by the United States Department of Public Health and considerable discussion took place concerning how an extensive fact finding program could be arranged for the State of Michigan.

It was decided to draw up a plan or program which would be submitted to The Council of the Michigan State Medical Society for approval and if approved an effort would then be made to obtain funds from the Federal Government to carry on the study.

* * *

MINUTES OF MEETING OF MATERNAL HEALTH COMMITTEE

April 19, 1936

The meeting was called to order by Dr. Alexander M. Campbell, Chairman, at Ann Arbor. Those present were Dr. Alexander Campbell, Grand Rapids; Dr. Norman Miller, Ann Arbor; Dr. Ward F. Seeley, Detroit; Dr. Harold Furlong, Pontiac; Dr. H. M. Gafafer, United States Public Health Service, and Dr. Nathan Sinai. Absent: Dr. H. W. Wiley, Lansing.

Concerning the proposed study of the obstetrical practice in the State of Michigan, letters were read from the members of the Executive Committee of The Council in which this study was given approval.

A discussion of the preparation of a movie for presentation before lay audiences resulted in a request to be asked of Dr. Lillian R. Smith for financial aid in the preparation of this movie film.

A letter which the Committee proposes to send to the President of each county medical Society was read and discussed and the Chairman of the Committee requested to send out this letter at an early date with follow-up letters at future dates.

The Lillian Smith program which was considered at the Lansing meeting on April 1 was discussed and the Committee approved of the plan which she outlined and suggested that one member of her local Committee should be Chairman of the Committee on Maternal Health of the County Medical Society.

Dr. Fred Adair's letter asking coöperation with Dr. Slemons and Dr. Lillian R. Smith in our Maternal Health Program was read and discussed. Blanks for the proposed Obstetrical study were submitted to the Committee by its different members and these blanks were referred to Dr. Gafafer to revise, review and correct, and they will be given consideration at the next meeting, which will be held at Hotel Olds, Lansing, Michigan, on May 3, 1936, at 10:00 a. m.

* * *

MINUTES OF MEETING OF MATERNAL HEALTH COMMITTEE

May 3, 1936

The meeting was called to order at 10:00 a. m. by Dr. Alexander M. Campbell, Chairman, in the Olds Hotel, Lansing. Those present were Drs. Alexander M. Campbell, Grand Rapids; H. A. Furlong, Pontiac; Norman F. Miller, Ann Arbor; and H. W. Wiley, Lansing. Also present were Dr.

W. J. V. Deacon, Department of Health; Dr. W. M. Gafafer, United States Public Health Service, Washington, D. C.; and Secretary C. T. Ekelund, Pontiac. Absent: Dr. Ward F. Seeley, Detroit.

The purpose of the meeting was to consider in detail the questionnaire which is to be sent out to the physicians of Michigan relative to the survey of obstetrical practice at the present time. Data is to be obtained from certificates of births covering six months during this year, staggered so as to avoid seasonal variations. It is proposed to estimate the amount and kind of prenatal care, the type of obstetric practice at delivery as conditioned by complications *accidental* to pregnancy; the preparation of the patient and of the physician for delivery; the nature of the delivery itself; the difficulties encountered and the complications *incidental* to pregnancy and labor.

Previous studies have been made on maternal and infant mortality and morbidity, but this is the first attempt made to evaluate the quality of obstetrical service on any considerable scale. The degree to which the quality of such service affects maternal and infant mortality is difficult to evaluate and the present study should shed much light on this question. The committee hopes that it will be afforded 100 per cent coöperation by physicians to whom the questionnaires will be sent.

* * *

MINUTES OF MEETING OF MATERNAL HEALTH COMMITTEE

May 17, 1936

The meeting was called to order by the Chairman, Dr. Alexander M. Campbell, at 10:00 a. m., Hotel Olds, Lansing. Those present were Drs. Campbell, Grand Rapids; H. A. Furlong, Pontiac; Norman F. Miller, Ann Arbor; W. F. Seeley, Detroit; and H. W. Wiley, Lansing. Also present were Dr. W. J. V. Deacon, State Department of Health, Lansing; Dr. W. M. Gafafer, United States Public Health Service, Washington, D. C.

The meeting was opened with a discussion of the situation in which the doctor resides in one county and the birth occurs in another. Dr. Deacon explained that the law requires that a birth be reported to the registrar in the district in which it occurs.

Dr. Gafafer began a discussion of the questionnaire which was revised at the meeting of May 3. Additional changes were agreed upon.

The Committee decided that a sample copy of the questionnaire, in which the changes suggested today have been incorporated, shall be sent to each member, who will in turn send his comments to Dr. Gafafer, United States Public Health Service, Washington, D. C.

The instructions will be placed on the front of the folder, which will be accompanied by a separate letter of explanation.

It was Dr. Campbell's suggestion that the folders be sent out from the State Society to the physicians, to be followed up by the Local Committees, since it will be approximately three months before the committees are appointed.

Dr. Miller read a letter which he had composed, upon the suggestion of Dr. Campbell, with the view of persuading Dr. Dempster of THE JOURNAL to give publicity to the work of this Committee. The letter, which is to be printed in the next issue of THE JOURNAL, was heartily approved by the Committee.

Dr. Wiley reported that after conversations with Dr. Slemons and Dr. Smith, he was assured of five hundred dollars for the Committee immediately for the cost of the film, and an allowance in the budget of two thousand dollars for traveling expenses. There will be an allowance of hotel bills, meals, and five cents per mile each way. It is necessary that

the vouchers go through the Auditor General's Department, even though this is federal money.

Dr. Campbell suggested that the members be thinking about proper speakers all over the State; also the preparation of a speech to be given with the showing of the film in order that all speeches may be virtually identical.

In respect to evaluating the questionnaires, Dr. Deacon expressed the opinion that practicable procedure is to have the Committee go over twenty-five or thirty of them. After the ideas have been set and framed up, it would be best to have one person do the evaluating.

It was agreed by the Committee that the duplicating of the birth certificates might begin immediately. Dr. Gafafer and Dr. Deacon discussed the dextragraphing of these certificates with Mr. Gold of the Remington Rand Company.

Mr. Gold stated that the dextragraphing camera can be sent to Lansing with an operator doing the work in the Department of Health offices. The rolls will be sent to the laboratory of the company in New York to be developed, and the prints will be returned to any place designated by the Committee.

The certificates for January, February and March would total from twenty to twenty-four thousand. Mr. Gold quoted the price of dextragraphing at \$26.75 per thousand complete, including transportation, using the lightest weight of paper. The rolls will be cut up and kept in order by the Remington Rand Company. (Adoptions are included with birth certificates and will be taken out of the group before they are duplicated, thus leaving holes in the numerical order.) The entire process can be completed, according to Mr. Gold, within ten days.

The meeting was adjourned at twelve o'clock noon. No day certain was set for the next meeting, but it was suggested by several of the members that another meeting should be called approximately a month from this date.

* * *

MINUTES OF MEETING OF MATERNAL HEALTH COMMITTEE

July 12, 1936

The meeting was called to order by Chairman Campbell in the Olds Hotel, Lansing. Those present were Drs. Alexander M. Campbell, Grand Rapids; Norman F. Miller, Ann Arbor; Ward F. Seeley, Detroit; H. A. Furlong, Pontiac. Also present Dr. Palmer of the United States Department of Health. Dr. Furlong was appointed as temporary secretary. Absent: Dr. H. W. Wiley, Lansing.

Dr. Miller read a prepared statement and discussed at length the necessity for increasing the clinical material available for teaching obstetrics at the University of Michigan, and recommended vigorous action by this Committee to remedy the situation by presentation of the problem to the House of Delegates. The members of the Committee warmly agreed with Dr. Miller and were of the opinion that immediate action should be taken.

Dr. Seeley reported upon the progress in preparing a movie on "Prenatal Care."

Dr. Miller said that federal funds were available for a short lecture course in Postgraduate Obstetrics for county medical societies, and that Dr. Alexander M. Campbell was available for the series of lectures with the cooperation of the Department of Postgraduate Medicine of the University of Michigan and Michigan State Department of Health.

Dr. Palmer, representing the United States Department of Health, took up several matters in connection with the survey on obstetrical practice. The schedules for physicians are printed. The birth certificates have been dextragraphed. It was decided to start mailing the forms to physicians September 1

with a letter from the Chairman of this Committee and a sample schedule. Letters were to be sent to Chairman of each County Maternal Health Committee.

The question of publicity concerning the survey was discussed. Dr. Furlong was asked to contact Dr. C. T. Ekelund, Secretary of the Michigan State Medical Society. It was decided not to release publicity to *The Journal of the American Medical Association* or lay press at present.

Meeting adjourned at noon.

HAROLD A. FURLONG, M.D.,
Temporary Secretary.

MINUTES OF MEETING OF THE RADIO COMMITTEE

May 7, 1936

1. *Roll Call.*—The meeting was called to order by Dr. Fred H. Cole, Chairman, at 12:45 p. m., in the Wayne County Medical Society Building, Detroit, Michigan. Present were Drs. Fred H. Cole, Detroit; John Sundwall, Ann Arbor; K. H. Lowe, Battle Creek. There were also present Drs. James D. Bruce, Ann Arbor; D. J. Levy, Detroit; Miss Mary Connolly of the Detroit Health Department; Mr. Waldo M. Abbot, Director of Radio Broadcasting, University of Michigan; Mr. Wm. J. Burns, Executive Secretary, MSMS; Mr. J. A. Bechtel, Acting Executive Secretary, WCMS; and Mr. Clare Gates, Field Secretary of the Joint Committee.

2. *Interests of Radio Committee.*—Dr. Cole opened the meeting by giving a brief résumé of the extent to which the radio is being used by local medical societies, the Wayne County Medical Society, and the Detroit Health Department. He then briefly stated the interests of his Committee, as follows:

(a) A means whereby persons responsible for existing regularly scheduled health and medical programs might exchange future program schedules.

(b) Discussion as to whether or not the State Medical Society should arrange for programs other than the present scheduled programs.

(c) A means of assisting committees in arranging for broadcasting facilities without the necessity for each committee making its own contacts with radio stations.

(d) Discussion of types of presentation of radio programs.

(e) A means of publicizing future broadcasts.

3. *Program of Radio Committee.*—After considerable discussion, it was agreed that the Committee should:

(1) Take an inventory of all broadcasting stations in the state, listing all programs on public health and medical subjects according to the organization sponsoring it.

(2) Start a library consisting of radio talks on various subjects that could be made available to those requesting such material.

(3) Provide a means for directors of radio programs on medical and health subjects to exchange their schedules in order to present a more orderly and continuous series of programs.

(4) Develop a program that would bring about a better distribution throughout the state of this form of lay education.

(5) Evolve a plan for announcing future broadcasts in local newspapers.

SOCIETY ACTIVITY

4. *Survey of Health Programs.*—Attention was called to the fact that the Joint Committee on Public Health Education was initiated by the State Medical Society for the purpose of developing an educational program that would serve as a coordinating unit of all existing health educational activities.

In consideration of this fact the committee agreed that the Joint Committee be requested through its field director to conduct a survey of programs now being given over Michigan radio stations and to learn as far as possible what, if any, areas of the state are not being reached.

5. *Adjournment.*—The Chairman thanked all for their attendance and advice and adjourned the meeting at two o'clock.

MINUTES OF THE MEETING OF JOINT COMMITTEE ON PUBLIC HEALTH EDUCATION

May 22, 1936

1. In the absence of President Ruthven, Dr. Bruce acted as Chairman, pro tem, and called the meeting to order in the Michigan Union, Ann Arbor, at 1:30 p. m.

Present: *Michigan State Medical Society*—Drs. Grover C. Penberthy, James H. Dempster, B. R. Corbus, A. C. Furstenberg, and Executive Secretary Wm. J. Burns.

University of Michigan—Drs. James D. Bruce, John Sundwall, W. D. Henderson, C. A. Fisher, and Mr. Clare Gates.

Michigan State Dental Society—Drs. U. G. Rickert, W. W. Gibson, Kenneth Easlick, and A. C. Thompson.

Wayne University, College of Medicine and Surgery—Dr. R. B. Allen, Dean.

Michigan State Conference of Social Work—Mr. John MacLellan.

Michigan State Nurses Association—Mrs. Barbara H. Bartlett.

Michigan Division, American Red Cross—Miss Josephine Davis.

Michigan Association of Sanitarians—Dr. Lloyd R. Gates.

Michigan Association of School Physicians—Dr. V. E. Volk, Sec'y.

Michigan Congress of Parents and Teachers—Mrs. W. T. Sanders, President; and Mrs. Fred Raymond.

Michigan Education Association—Mr. David A. Van Buskirk, President.

Michigan Home Economics Association—Miss Ruth Freegard.

Michigan Physical Education Association—Dr. Mabel E. Rugen, President.

Michigan State Federation of Women's Clubs—Mrs. W. E. Chapman, President.

Probate Judges Association of Michigan—Judge Frank L. McAvinchey.

Subcommittee on Scientific Program—Dr. L. O. Geib.

Subcommittee on Health Education in Schools—Drs. D. W. Gudakunst, K. L. Heaton, and Misses Alice Evans and Otilia Frisch, and Mr. V. S. Blanchard.

Subcommittee on Adult Health Education—Dr. Roy H. Holmes and Misses Edna V. Smith and Mary Connolly.

Guests—Dr. Henry Otto, Kellogg Foundation; Dr. K. E. Miller and Mr. H. E. Miller of the U. S. Public Health Service.

2. Dr. Henderson read the minutes of the meeting, which were approved as read.

3. Dr. B. R. Corbus made a brief summary of the history of the Joint Committee for the benefit of the augmented membership of the Committee.

4. Reports of Committees—(a) Mr. Gates, Field Secretary, read a report of his activities in relation to coordinating the work of the various units of the Joint Committee.

(b) Dr. Mabel Rugen gave a report for the standing committee on Health Education in Schools. The Chairman asked for comments on Dr. Rugen's report. Dr. Heaton, representing the State Department of Public Instruction, commented very favorably on the progress of this committee and pointed out that its activities covered a field in which there had been much confusion, and expressed himself as believing that this Committee is engaged in a much needed activity.

(c) Miss Mary Connolly read the report for the Committee on Adult Education.

5. Following the report on Adult Education, Mr. V. S. Blanchard reviewed briefly the problem of safety education for the purpose of bringing it before the Joint Committee for their consideration for the purpose of including this form of education in their programs.

6. Mrs. Sanders read a communication from the Congress of Parents and Teachers in which she informed the Joint Committee that her organization would like both direction and assistance in the programs for local groups. She further pointed out that the employment of a field representative for this activity would lend a personal touch and would probably bring results that could be obtained in no other way.

7. Mrs. Chapman stated that she had been requested by the National offices of the Women's Federated Clubs to appoint someone to stimulate education in Cancer Prevention and wondered if the Joint Committee, as a part of its coordinating activities, could act as a central agency, with the end in view of preventing overlapping in this field of education.

The Chairman pointed out that within the past week the Cancer Committee of the State Medical Society had requested the Joint Committee to assist in putting into effect their program to avoid overlapping of activities.

8. The Chairman asked for discussion concerning the time and place of the next meeting, stating that it had been customary in the past to hold meetings of the Joint Committee in connection with the annual meeting of the Council of the State Medical Society.

Dr. Penberthy suggested that because of the augmented membership of the Joint Committee and because of its activities, it seemed to him no longer necessary that the Joint Committee meet with the Council of the Medical Society. He suggested that it might be wise, for the above reasons, to hold meetings of the Joint Committee separately from any other organization.

It was moved and supported that the time and place of the next meeting be left to the designation of the Executive Committee.

9. Meeting adjourned.

W. D. HENDERSON,
Secretary.

JOUR. M.S.M.S.

MINUTES OF MEETING OF LEGISLATIVE COMMITTEE

June 24, 1936

1. *Roll Call.*—The meeting of the Legislative Committee was called to order by Dr. H. H. Cummings, Chairman, at 7:00 p. m. in the Wayne County Medical Society Building. Present were Drs. Cummings, Ann Arbor; F. B. Burke, Detroit; C. F. Snapp, Grand Rapids. Also present were President Grover C. Penberthy, Detroit; Dr. James H. Dempster, Detroit; Dr. T. K. Gruber, Eloise; and Executive Secretary Wm. J. Burns. Absent: Drs. L. G. Christian, Lansing; Henry Cook, Flint (excused); L. J. Gariepy, Detroit; and H. E. Perry, Newberry.

2. *Minutes.*—The minutes of the meeting of May 23 were approved as printed.

3. *Committee Reports.*—The activities and recommendations of the sub-committees were discussed and accepted, on motion of Drs. Burke and Snapp.

4. *Legislative Bulletins.*—The Legislative Committee approved the use of periodic legislative bulletins to advise the appropriate committees of county medical societies regarding the situation in legislative activity. The Committee authorized the mailing of Legislative Bulletin No. 1 after the Executive Committee of The Council approves same. The Committee also felt that it should use the Bureau of Information of the MSMS and the speakers' Bureaus of the county medical societies to bring correct information on medical legislation to the public.

5. *Legislative Exhibit.*—Dr. Gariepy, Chairman of the Exhibit Committee, was not present. The Executive Secretary was instructed to write Dr. Gariepy for information on progress with the exhibit.

6. *Afflicted-Crippled Child Laws.*—Report was given on the status of these laws, and on the activity of the Governor's Special Commission on Welfare and Relief. Also on the Governor's Executive Order of June 4, 1936, and on the new forms being developed by the Auditor General. Dr. Ray G. Tuck's suggestion for coordination of medical services in Michigan was also presented to the Committee.

7. *Adjournment.*—The Chair thanked all for their attendance and helpful advice and adjourned the meeting at 9:20 p. m.

MINUTES OF MEETING OF EXECUTIVE COMMITTEE OF THE COUNCIL

July 1, 1936

1. *Roll Call.*—The meeting was called to order by Dr. Henry Cook, Chairman, at 7:55 p. m., Statler Hotel, Detroit. Those present were Drs. Cook of Flint; A. S. Brunk and H. R. Carstens, Detroit; C. E. Boys, Kalamazoo; T. F. Heavenrich, Port Huron; and Frank E. Reeder, Flint. Also present were President Grover C. Penberthy, Detroit, President-elect H. E. Perry, Newberry; Secretary C. T. Ekelund, Pontiac; Dr. James H. Dempster, Editor, Detroit; Drs. S. W. Insley, P. R. McQuiggan, and F. A. Purcell, Detroit; and Executive Secretary Wm. J. Burns.

2. *Minutes.*—The minutes of the meeting of May 22 were read and approved. The statement in Item 10 that "The Executive Committee author-

ized opening of the exhibits to the public on Tuesday afternoon, September 22," was discussed, as some of the section officers were said not to favor this decision. The motion of Drs. Brunk-Reeder that the exhibits be opened to the public on Tuesday afternoon, September 22, was unanimously approved.

3. (a) *Relief Medicine.*—Dr. Insley reported for the Subcommittee on Relief Medicine, reading the minutes of this Committee's meeting of June 5, as amended. A lengthy discussion on problems of relief medicine ensued, during which Dr. Insley read inquiry from the Philadelphia County Medical Society which he stated he would endeavor to answer. Dr. Cook spoke about his trip to Traverse City on June 25 to address the Michigan Association of Probate Judges. He felt that "the farther we keep government away from paying for medical care, the better for the profession." Motion of Drs. Heavenrich-Boys that further discussion of this subject be deferred until the meeting of July 8, which meeting is authorized by the Executive Committee of The Council, to be held at the Wayne County Medical Society Building and to include complimentary dinner to all guests, but no traveling expenses. Carried unanimously. Dr. Carstens felt that the medical profession needs slowly to educate the people, as we are part of society and not arbiters thereof.

(b) *Governor's Special Commission on Welfare and Relief.*—The personnel of this Commission was presented; also the membership of its Executive Committee.

4. *Afflicted-Crippled Children Laws.*—The Special Committee reported through Dr. Penberthy on its meeting with Governor Fitzgerald, June 3. Dr. Perry reported on his conference with the Governor on July 1, stating that the Governor promised to recommend to the Finance Committee of the State Administrative Board on July 20, that Schedules A and C be revived as of July 1, 1936, and that physicians be paid not to exceed \$50,000 per month (estimate of cost of medical fees) for the balance of 1936, or a total of \$300,000.

5. *Tuberculosis Division in State Health Department.*—The minutes of the June 10 Joint Meeting of the PRC-PMC with State Health Commissioner Slemons, et al, were read and report given on efforts to incorporate a tuberculosis control service in the State Health Department.

6. *Conditions in the Councilor Districts.*—(a) Dr. Heavenrich reported on the alleged unethical conduct of two physicians in the Seventh Councilor District. Full discussion. Motion of Drs. Carstens-Brunk that the Chair be authorized to appoint a committee to study the matter of the alleged unethical practices of these two physicians in the Seventh Councilor District. and that said committee report at the next meeting of the Executive Committee of The Council with recommendations of methods of procedure. Carried unanimously.

Committee: Dr. Carstens, Chairman; Drs. Brunk and Reeder.

(b) A letter from George Granger of the SERA was read and, on motion of Drs. Heavenrich-Brunk, was ordered sent to the Gratiot-Isabella-Clare County Medical Society. Carried unanimously.

(c) A letter from Dr. Robert L. Wade of Coldwater relative to difficulties with the Filter System in Branch County, was read and ordered placed on file.

(d) The report on "The Cookware Health Company of America," in Hartford, Van Buren County, Michigan, was read and referred to Councilor Boys.

(e) Letters from Dr. C. E. Toshach of Saginaw, Dr. M. A. Martzowka of Roscommon, and Dr. Lloyd L. Savage of Caro, relative to irregular practitioners in their respective communities, were read.

7. *Admission Policy at University Hospital.*—Dr. Penberthy reported, and the matter was thoroughly discussed. The Chair was authorized to appoint a committee to contact Dr. J. D. Bruce, Vice President of the University of Michigan. Committee: Dr. Carstens, Chairman, and Dr. Penberthy.

8. (a) *Membership Report.*—Paid membership to date is 3,126 members, compared to 2,965 last year.

The JOURNAL income for June was \$746.42; printing costs were \$792.31. Bills payable for the month were presented, and, on motion of Drs. Brunk-Boys, were approved and ordered paid. Financial report was presented, accepted and placed on file.

(b) The recommendation of Treasurer Wm. A. Hyland that the Michigan State Medical Society approve the "Amended Plan of Reorganization of the Public Gas & Coke Company" was presented, and, on motion of Drs. Boys-Brunk, the Treasurer's recommendation was approved. Carried unanimously.

(c) Progress on plans for the Annual Meeting was reported by President Penberthy, Secretary Ekelund, and the Executive Secretary. The official program will be sent to every member of the MSMS in advance of the Annual Meeting.

The offer of 4,000 copies of "Detroit Publicity" by the Detroit Convention and Tourist Bureau was presented and discussed. Motion of Drs. Boys-Reeder that this question be referred to a Special Committee to handle, with power to act. Carried unanimously.

Committee: Drs. Brunk, Penberthy, Carstens.

9. *Recognition for Service to Michigan Medicine.*—A proposed resolution was presented and discussed. It was felt that such a procedure, especially in the field of economic medicine, might lead to embarrassments. Motion of Drs. Heavenrich-Brunk that the matter be laid on the table. Carried unanimously.
10. *Resolution on Dr. Carl F. Moll's Death.*—Speaker Reeder asked the advice of the Executive Committee concerning appointment of a House of Delegates' Committee to draw up resolutions to the late Dr. Moll. General discussion. Dr. Reeder appointed Dr. Heavenrich as Chairman of this Committee.
11. *Roadside First-Aid.*—Motion of the Preventive Medicine Committee endorsing the principle of widespread instruction in first-aid work was presented; Secretary Ekelund explained the background for this action.
12. *Thanks to Dr. Cook.*—Dr. Brunk moved that a vote of thanks to Dr. Henry Cook be placed on the minutes for his journey to Traverse City on June 25 to address the Michigan Association of Probate Judges, and that Dr. Cook's mileage and hotel expenses be paid. Carried unanimously. President Penberthy suggested to Speaker Reeder that the President of the Michigan Association of Probate Judges be invited to speak before the House of Delegates of the MSMS

in September, 1936. Discussion resulted in a motion by Drs. Boys-Brunk that the Executive Committee of The Council request the Speaker of the House of Delegates to formally invite the President of the Michigan Association of Probate Judges to speak before the House of Delegates Tuesday morning, September 22, 1936, and that this be printed in the official program. Carried unanimously. Secretary Ekelund was requested to send official invitation.

Dr. Ekelund asked advice about including with the committees' annual reports the report of the Goitre Committee. General discussion. Motion of Drs. Heavenrich-Boys that the annual report of the Goitre Committee be not presented to the House of Delegates with the other committee reports, but be placed before the Pediatric Section. Carried unanimously.

13. *Bureau of Information.*—Approval was given for purchase of steel drawers for the 425 new addressograph plates of all newspapers of Michigan, on motion of Drs. Boys-Heavenrich. Carried unanimously.

14. *Adjournment.*—The Chair thanked all for their attendance and helpful advice and adjourned the meeting at 11:50 p. m.

DO YOU KNOW ABOUT THE VOLTA BUREAU?

"We consulted several specialists, and all of them confirmed our fears, but none offered any solution of our problem." Thus the mother of a small deaf child wrote to the Volta Bureau. The sentence might be quoted verbatim from many letters written by parents of deaf or hard of hearing children, or by hard of hearing adults.

The knowledge that deafness is present and that it is incurable comes with the force of a major calamity. It is so crushing in its effect that something positive in the way of help must be offered immediately, if the individual is not to spend desperate years in a bewildered effort to adjust himself. The parents of a deaf child must be told that the child can be taught to speak and can be successfully educated, and that this education may be begun at home immediately, even if the child is not more than two years old. The parents of a child whose hearing is only slightly impaired must be given advice as to his adjustment. The hard of hearing adult must be told about lip reading, about hearing aids, about social efforts in his behalf.

The Volta Bureau was established for the purpose of furnishing all this information to all who ask for it. Its services are free. Alexander Graham Bell, the son of a hard of hearing mother, the husband of a deaf wife, the lifelong friend of everyone handicapped by deafness, used the money received as a prize for inventing the telephone to found the Volta Bureau so that anyone confronting the problems of deafness might be assured of help. Advice is given as to schools and preschool training, lip reading instruction, hearing aids, social contacts, psychological difficulties. While the Volta Bureau is not equipped to do employment service, it gives information in regard to the fields of activity that are open to the deaf and the hard of hearing.

The Volta Review, a magazine for parents and teachers of the deaf and for the hard of hearing, is on the reading table of many physicians. Pamphlets dealing with all phases of deafness except medical problems are available to all who ask for them. Lists of such pamphlets and sample copies of the magazine will gladly be sent free of charge. The Volta Bureau is located at 1537 35th St., N.W., Washington, D. C.

SOCIETY ACTIVITY

HOUSE OF DELEGATES, MICHIGAN STATE MEDICAL SOCIETY, 1936

Names of alternates appear in italics.

Alpena-Alcona-Presque Isle

F. J. O'Donnell, Alpena
D. A. Cameron, Alpena

Barry

R. B. Harkness, Hastings
H. S. Wedel, Freeport

Bay-Arenac-Iosco-Gladwin

L. Fernald Foster, Bay City
C. S. Tarter, Bay City

Berrien

R. S. Snowden, Buchanan
D. Richmond, St. Joseph

Branch

R. L. Wade, Coldwater
Samuel Schultz, Coldwater

Calhoun

Harvey Hansen, Battle Creek
A. T. Hafford, Albion
Wm. M. Dugan, Battle Creek
N. H. Amos, Battle Creek

Cass

W. C. McCutcheon, Cassopolis
E. M. Cunningham, Cassopolis

Chippewa-Mackinac

J. G. Blain, Sault Ste. Marie
F. Wendell Tamblyn, Sault Ste. Marie

Clinton

Dean W. Hart, St. Johns
F. D. Richards, DeWitt

Delta

J. J. Walch, Escanaba
No alternate named

Dickinson-Iron

E. M. Libby, Iron River
W. H. Huron, Iron Mountain

Eaton

A. G. Sheets, Eaton Rapids
P. Engle, Olivet

Genesee

F. E. Reeder, Flint
George Curry, Flint
Donald R. Brasie, Flint
R. S. Halligan, Flint
D. R. Wright, Flint

Gogebic

W. E. Tew, Bessemer
W. L. Maccani, Ironwood

Grand Traverse-Leelanau-Benzie

E. F. Sladek, Traverse City
No alternate named

Gratiot-Isabella-Clare

Wm. E. Barstow, St. Louis
M. G. Becker, Edmore

Hillsdale

O. G. McFarland, North Adams
A. W. Strom, Hillsdale

Houghton-Baraga-Keweenaw

Geo. C. Stewart, Hancock
G. M. Waldie, Hancock

Huron-Sanilac

D. D. McNaughton, Argyle
J. C. Webster, Marlette

Ingham

L. G. Christian, Lansing
Harold W. Wiley, Lansing
C. F. DeVries, Lansing
O. M. Randall, Lansing
R. Wadley, Lansing
R. L. Finch, Lansing

Ionia-Montcalm

F. H. Ferguson, Carson City
Wm. L. Bird, Greenville

Jackson

Philip A. Riley, Jackson
James J. O'Meara, Jackson
Horatio A. Brown, Jackson
Corwin S. Clarke, Jackson

Kalamazoo-VanBuren-Allegan

F. T. Andrews, Kalamazoo
R. G. Cook, Kalamazoo
Chas. TenHouten, Paw Paw
F. M. Boothby, Lawrence
H. H. Stryker, Kalamazoo
W. R. Vaughan, Plainwell

Kent

B. R. Corbus, Grand Rapids
Leon Sevey, Grand Rapids
Wm. R. Torgerson, Grand Rapids
A. V. Wenger, Grand Rapids
Carl F. Snapp, Grand Rapids
J. D. Brook, Grand Rapids
R. R. Smith, Grand Rapids
D. Hagerman, Grand Rapids
G. H. Southwick, Grand Rapids
Paul Kniskern, Grand Rapids

Lapeer

D. J. O'Brien, Lapeer
H. M. Best, Lapeer

Lenawee

A. W. Chase, Adrian
G. C. Hall, Adrian

Livingston

H. G. Huntington, Howell
J. J. Hendren, Fowlerville

Luce

R. E. Spinks, Newberry
A. T. Rehn, Newberry

Macomb

A. B. Bower, Armada
J. N. Scher, Mt. Clemens

Manistee

K. M. Bryan, Manistee
L. A. Lewis, Manistee

Marquette-Alger

V. Vandeventer, Ishpeming
R. A. Burke, Palmer

Mason

Lars W. Switzer, Ludington
No alternate named

Mecosta-Osceola

Geo. W. Yeo, Big Rapids
Jacob Bruggema, Evart

Menominee

Edward Sawbridge, Stephenson
No alternate named

Midland

David Littlejohn, Midland
J. H. Sherk, Midland

Monroe

Dean Denman, Monroe
J. H. McMillin, Monroe

Muskegon

Roy H. Holmes, Muskegon
Leland E. Holly, Muskegon

Newaygo

O. D. Stryker, Fremont
W. H. Barnum, Fremont

Northern Michigan

Guy C. Conkle, Boyne City
No alternate named

SOCIETY ACTIVITY

Oakland

Otto Beck, Birmingham
Ernest Bauer, Hazel Park
A. V. Murtha, Pontiac
Robert Baker, Pontiac

Oceana

W. Lemke, Shelby
Clinton Day, Hart

O. M. C. O. R. O.

C. R. Keyport, Grayling
No alternate named

Ontonagon

E. J. Evans, Ontonagon
J. L. Bender, Mass

Ottawa

E. A. Stickley, Coopersville
W. C. Kools, Holland

Saginaw

Ralph Jiroch, Saginaw
C. E. Toshach, Saginaw
L. C. Harvie, Saginaw
O. W. Lohr, Saginaw

St. Clair

A. L. Callery, Port Huron
T. E. DeGurse, Marine City

St. Joseph

R. A. Springer, Centerville
D. C. Weir, Three Rivers

Schoolcraft

Gail Broberg, Manistique
A. R. Tucker, Manistique

Shiawassee

I. W. Greene, Owosso
W. E. Ward, Owosso

Tuscola

O. G. Johnson, Mayville
A. S. Rundell, Vassar

Washtenaw

John Sundwall, Ann Arbor
Dean W. Myers, Ann Arbor
John Wessinger, Ann Arbor
S. L. LaFever, Ann Arbor
H. B. Britton, Ypsilanti
Warren E. Forsythe, Ann Arbor

Wayne (All delegates from Detroit except otherwise indicated)

R. C. Jamieson, T. K. Gruber of Eloise, J. M. Robb, Ralph H. Pino, L. J. Hirschman, Fred H. Cole, Jos. H. Andries, H. A. Luce, W. D. Barrett, Wm. J. Cassidy, Wm. J. Stapleton, F. B. Burke, Wm. R. Clinton, Douglas Donald, A. E. Catherwood, A. P. Biddle, S. W. Insley, Harry F. Dibble, Angus McLean, Chas. R. Kennedy, John L. Chester, E. D. Spalding, C. F. Brunk, Frank A. Kelly, H. W. Plaggemeyer, H. W. Yates, Chas. E. Dutches, David I. Sugar, A. W. Blain, P. L. Ledwidge, C. K. Hasley, A. F. Jennings, W. S. Revero.
L. J. Gariepy, H. P. Cushman, B. U. Estabrook, C. E. Umphrey, M. H. Hoffmann, C. R. Davis, Wm. Honor of Wyandotte, L. T. Henderson, J. A. Hockey, B. L. Connolly, J. A. Kaspar, L. O. Geib, S. E. Gould, F. C. Kidner, S. A. Flaherty, E. R. Witwer, H. J. Kullman, C. R. Simpson, B. C. Krieg, H. W. Peirce, F. W. Hartman, R. B. Walker, Mark McQuiggan, W. N. Braley, Allan W. McDonald, Frank J. Kilroy, Wm. P. Woodworth.

Wexford

W. Joe Smith, Cadillac
J. F. Carrow, Marion

LIST OF DETROIT HOTELS

Hotel	No. of Rooms	Single		Double		Twin Bedded	
		With Bath	Without Bath	With Bath	Without Bath	With Bath	Without Bath
Abington	135	\$2.50 up		\$3.50 up			
700 Seward	Suites—\$50 up	monthly					
Belcrest	135	\$2.50 up		\$4.00 up			
5440 Cass	Suites—\$50 up	monthly					
Book Cadillac	1200	\$3.00 up		\$4.50 up		\$5.00 up	
Wash. Blvd.							
Briggs	200	\$2.00 up		\$3.00 up		\$4.00 up	
114 W. Adams							
Dearborn Inn	100	\$3.00 up		\$5.00 up		\$6.00 up	
Dearborn, Mich.							
Detroit Leland	800	\$2.50 up		\$3.50 up		\$4.50 up	
Cass at Bagley							
Fort Shelby	900	\$2.00 up	\$1.50 up	\$3.00 up		\$4.00 up	
Lafayette at First							
Fort Wayne	300	\$2.00 up		\$3.00 up		\$4.00 up	
408 Temple							
Lee Plaza	196	\$2.50 up		\$3.50 up		\$4.00 up	
2240 W. Gr. Blvd.	Suites—\$65 up	monthly					
Lexington	100	\$2.00 up	\$1.25 up	\$3.00 up	\$2.00 up	\$3.00 up	
2970 W. Gr. Blvd.							
Madison Lenox	300	\$2.00 up	\$1.25 up	\$2.50 up	\$2.00 up		
Madison & John R.							
Norton	250	\$1.50 up	\$1.25 up	\$2.50 up	\$2.00 up		
Jefferson and Griswold							
Norton Palmer	200	\$2.50 up	\$1.50 up	\$3.50 up	\$3.00 up		
Windsor, Ont.	Suites—\$6.00 to	\$8.00 Daily					
Palmetto	331	\$2.50 up		\$4.00 up		\$4.00 up	
John R. & Hancock							
Seward	561	\$2.50 up		\$3.50 up			
59 Seward Ave.	Suites—\$50 up	monthly					
Statler	1000	\$2.50 up		\$4.50 up		\$5.00 up	
Grand Circus Park							
Tuller	800	\$2.00 up		\$3.50 up			
Park & Adams							
Wardell	627	\$3.00 up		\$4.00 up		\$4.00 up	
Kirby at Woodward	Suites—\$65 up	monthly					
Webster Hall	800	\$2.00 up	\$1.25 up	\$3.00 up	\$2.00 up	\$3.00 up	
111 Putnam							
Whittier	816	\$3.00 up		\$5.00 up		\$5.00 up	
400 Burns Drive	Suites—\$65 up	monthly					
Wolverine	500	\$2.00 up		\$3.00 up		\$4.50 up	
Witherell at Elizabeth							
Priscilla Inn	135	\$1.00 up		\$1.50 up			
2916 Cass Ave.		(For Women Only)					
Prince Edward	250	\$2.50 up		\$4.50 up		\$5.00 up	
Windsor, Ont.							

COUNTY SOCIETIES

EATON COUNTY

The Eaton County Medical Society held its regular June meeting at the Corne's Tavern, Charlotte, on June 25, 1936. Following the dinner, the meeting was at once turned over to Dr. Wm. J. Butler of Grand Rapids, who addressed the society on the subject, "Office Management of Genito-Urinary Disorders."

Dr. Butler's talk was of great interest and value to the general practitioners who made up his audience. He emphasized and described in detail those procedures which can be carried out in the office and which do disclose very significant information when so used. Dr. Butler dwelt on the newer emphasis which is being placed on the hydrogen ion concentration of the urine in the treatment of urinary tract infections. Acidification is produced by means of ammonium carbonate or chloride and the urine tested by the indicator chlorphenol. Recently a new indicator paper nitrazine has been placed on the market and through its use the degree of urinary acidification can be very accurately estimated.

The speaker described in detail the routine treatment of acute and chronic gonorrheal infection in the male and demonstrated various syringes and instruments which he has found particularly valuable in his own practice. In response to a question offered by one of the audience, Dr. Butler discussed very fully the diagnosis and treatment of the so-called "cystitis" seen so frequently in elderly women with the very distressing symptoms of frequency, dysuria and sometimes strangury. In this connection, the features of greatest interest and importance were the occasional findings of chronic urethritis, urethral stricture, habit bladder and Hunter's ulcer with markedly decreased urinary bladder capacity and irritation. This latter condition is diagnosed by cystoscopic examination and treated by means of urethral dilatation and bladder dilatation. Often it is necessary to fulgurate the ulcer.

Dr. Butler's paper was ably discussed by Dr. L. G. Sevensen of Charlotte and Dr. A. G. Sheets of Eaton Rapids.

A short business meeting was held at which it was decided that this society would hold its next meeting on September 17, 1936, so as not to conflict with the state meeting in Detroit.

T. WILENSKY, M.D.,
Secretary.

JACKSON COUNTY

The May meeting was called to order by the President, Dr. Dengler, May 19. Dr. Alter reported on the immunization question, explaining that \$2,500 was found to be necessary for this work in the city which desired to be included in the program but that none of the commissioners or supervisors would act on it until after the elections. No action has been taken up to this date and the next meeting will be too late because schools will be closed before the work can be started even if they vote favorably on the matter.

The report of the treasurer was given by Dr. Bullen, there being \$64.80 in a savings and loan company, \$268.94 cash on hand and the auxiliary needed \$13.37 to help them in the cancer lecture instead of the \$20 awarded for that purpose.

It was announced that there would be no meeting in September due to the State Medical Society meeting in Detroit, September 21, 22, 23 and 24. The next regular meeting will therefore be October 20, 1936.

A letter was received from the state secretary in regard to holding a post-graduate conference for the benefit of Ingham and Jackson counties. This letter was read with the added information that Dr. E. I. Carr of Lansing had called the day of the meeting, asking that we appoint a committee to confer with one from Ingham county that was to be appointed that night. The idea was agreeable to all those present and this is to be taken care of in the fall, the committee to be appointed later.

Dr. Dengler reviewed in brief the discussion and the decision of the board of directors with regard to the minimum fee bill controversy. He stated that this was the opening gun of a campaign in an attempt to get a little better coöperation locally in the adherence to this bill. The committee is as follows:

Phil Riley for the general practitioner.

C. Corley for the internists.

D. F. Kudner for the surgeons.

E. O. Leahy for the OOO specialists.

F. Van Schoick for the pediatrics.

J. M. Edmonds for the west half of the county.

C. W. Schepeler for the east half of the county.

Dr. H. A. Brown, president of the Academy, asked that the men look back over their books for the past few months and be ready within the next week or so to state whether or not cases that come under the new county arrangement had been benefited and if so, what proportion had been helped. The Academy has done some very outstanding work so far in 1936 and the fall season will find them well along into further improvements for the benefit of all concerned.

Dr. E. H. Corley, speaking for the auditing committee, again warned the men that it would be necessary to get the o. k. from Mr. Scarborough for the additional ten-day periods in the hospital on all patients. There would be no payments for medical services rendered in any hospital during an unauthorized period.

The meeting was then turned over to Dr. Henry Balconi, chairman of the evening, who introduced his brother-in-law, Dr. Ivan B. Taylor, instructor in anesthesia at the University of Wisconsin Medical School. Dr. Taylor spoke on "Oxygen therapy with special consideration of administration by the nasopharyngeal catheter." This address was accompanied by lantern slides and a movie, the latter illustrating the technique of the use of this catheter with statistics proving the amount of oxygen delivered at the various rates of speed.

He reviewed the history of the use of oxygen in connection with anesthesia.

Quite a number of questions were asked by the audience and these were answered in detail by Dr. Taylor.

The meeting then adjourned.

H. W. PORTER, M.D., *Secretary*

MANISTEE COUNTY

The Manistee County Medical Society, at the meeting of May 14, decided to take one afternoon off, each week. A rotation list has been formulated, and certain ones remain on call for emergency. This list is posted at the Hospital, and the newspaper notice tells the public to call the Hospital, and a doctor will be provided. The rest of the physicians can go out of town as they wish.

Visitors from the outside were:

Bay City—Dr. L. Fernald Foster and Dr. P. R. Urmonst; Ann Arbor—Mr. Clair Gates; Muskegon—Dr. R. H. Holmes; Frankfort—Dr. Trautman; Traverse City—Drs. Kyselka, Osterline, Swartz, Murphy, Zimmerman and Boushong, Judge of Probate Pratt, Superintendent of Poor E. Nickerson and C. Bracken; Ludington—Dr. C. Paucktis, Pro-

bate Judge Owen J. Gavigan, and Superintendent of Poor Madison; Luther—Dr. G. H. Wood and Dr. Bertha Wood; Manistee—Probate Judge Charles Dovel.

C. L. GRANT, M.D., *Secretary*.

SAGINAW COUNTY

At the special meeting of the Medical Society held at St. Mary's Hospital, June 17, the Medical Filter Committee reported on the work done during the past five months in the examination of afflicted children. This report showed that three-fourths of the cases appearing before them had been turned down for State aid, and only those were approved who impressed the Board as being of an emergency nature. *The large group of unapproved cases were advised to return to their family physician for further advice.*

The fact was pointed out that many of these unapproved cases do have physical defects such as septic tonsils, et cetera, which may lead to further trouble in the future and that in the interest of good preventive medicine such defects really should be taken care of.

To bring about such corrections and at the same time to preserve the desired physician-patient relationship the following plan of the Filter Committee was approved and the Committee instructed to bring the matter to the attention of the Medical Society membership. The plan outlined below has the approval of both the Poor Commissioner, Mr. Hauffe, and Public Health officials, and the fullest coöperation of the Medical Society is desired.

The Plan

1. Only those cases will be examined by the Filter Committee who have first been approved by the Poor Commissioner's office as entitled to aid.

2. In dealing with the large group of cases who are not approved for State aid, the Filter Committee will furnish the applicant with a note to the family physician recommending such person as deserving of "special financial consideration." The family physician may then talk the matter over and arrange for the work on either a partial or deferred payment plan. In tonsil cases, which is by far the largest group, the hospital will accept \$8.00 on a cash basis. It would thus seem that almost every family could arrange to raise that amount, together with some payment for the physician. The family doctor will thus serve as his own social service agent, the parent will be able to get his child's defects corrected at a price he can afford to pay, the individual will be taught to be self supporting and the much desired physician-patient relationship will not be disturbed. The patient or parent should understand that his family doctor is doing this as a special favor because the physician believes his patient to be deserving of assistance.

3. It will be the policy of the Filter Committee to refer all unapproved cases back to the family physician. If the family physician is not prepared to do the surgery himself, it will greatly facilitate matters if he will get in touch with the surgeon and be of every possible assistance in bringing about a satisfactory arrangement.

4. In dealing with such cases it is trusted that the physician will handle them with tact and special consideration and in every way possible contribute to the success of the plan.

CLARENCE E. TOSHACH, M.D., *President*.
W. K. ANDERSON, M.D., *Secretary*.

WOMAN'S AUXILIARY

MRS. A. M. GIDDINGS, President, 22 Riverview Ave., Battle Creek

MRS. KENNETH LOWE, Secretary-Treasurer, 107 Elizabeth St., Battle Creek

MRS. L. C. HARVIE, Press Chairman, 341 Brockway Place, Saginaw

Michigan State Medical Society Makes Preparations for Hobby Exhibit

The Auxiliary to the Wayne County Medical Society is making extensive preparations for a "Hobby Exhibition" to be held in conjunction with the Michigan State Medical Convention which will meet in Detroit from September 21 to 24 inclusive. This exhibit will be displayed in the Washington Room at the Book-Cadillac Hotel adjoining the rooms where the various technical and scientific exhibits will be displayed.

According to the chairman the word "Hobby" is used for want of a better one. A number of exhibits have already been promised and some of these vie with museum pieces, as they are really valuable collections. As numerous physicians and their families DO things besides COLLECT things the word "HOBBY" is used, as it has a broader meaning.

This exhibition is open to all members of the Michigan State Medical Society and their immediate families.

Entry blanks (or facsimile) should be filled in and sent to Mrs. Milton D. Vokes, 444 East Grand Boulevard, Detroit, Michigan, as soon as possible. Entry blanks returned by August 10, 1936, will be published in the JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY for September. Entries close September 10, 1936.

An entry stub or facsimile must accompany each entry and should be addressed to "Hobby Exhibition," Michigan State Medical Society, Washington Room of Book-Cadillac Hotel, Detroit, Michigan, Care of John F. Ivory Company. The closing date for receiving articles is Sept. 18, 1936.

No entry fees will be charged.

Every precaution for the protection of exhibits will be taken; however, valuable collections should be insured as no responsibility will be assumed for loss or injury.

Articles will be displayed to their best advantage by experienced men.

Exhibitors are prohibited from removing any of their exhibits during or at the close of the convention.

Articles will be returned on September 25. Owners who would like to take their exhibits with them may do so on the morning of September 25 by presenting identification and leaving a receipt.

Physicians in Wayne County are interested and it is hoped that every county in Michigan will be well represented and that this will be one of the most outstanding affairs ever put on by the profession.

Say It Again

Attorney: "Now sir, did you, or did you not, on the date in question, or at any other time, previously or subsequently, say or even intimate to the defendant or anyone else, alone or with anyone, whether friend or mere acquaintance, or, in fact, a stranger, that the statement imputed to you, whether just or unjust, and denied by the plaintiff, was a matter of no moment or otherwise? Answer me, yes or no."

Witness: "Yes or no what?"—Anon.

MICHIGAN'S DEPARTMENT OF HEALTH

C. C. SLEMONS, M.D., Dr.P.H., Commissioner
LANSING, MICHIGAN

Pneumonia Research Grant

Dr. C. C. Slemons, state health commissioner, has announced the receipt of a grant of \$50,400 from the Commonwealth Fund of New York which will finance a three-year program to be undertaken in the laboratories of the Michigan Department of Health to improve the therapeutics in pneumonia and lower the cost of producing antipneumococcic sera.

The research will be carried out under the direction of Dr. C. C. Young, director of laboratories. Dr. Young stated that antipneumonia serum has already proved an effective agent in reducing death rates from 25 to 40 per cent in Type I and Type II pneumonia, the types most prevalent in this state, in experiments conducted by the Massachusetts Department of Health under the auspices of the Commonwealth Fund. The prohibitive cost of this treatment, however, has not permitted its wide usage. Dr. Young believed that this could be reduced to such an extent that eventually state-wide free distribution to physicians would be possible.

That pneumonia is causing considerable alarm in view of the increase during the past two years is attested by figures prepared by Dr. W. J. V. Deacon, Director of the Bureau of Records and Statistics, Michigan Department of Health:

"In 1933 there were 2,756 deaths from pneumonia, whereas in 1934 there were 3,466. This is an increase of 710 deaths, equivalent to about 26 per cent of the total deaths. This is the highest figure recorded since 1929 when 4,216 deaths were recorded, but in 1929 the early months in the year showed a sharp increase in the incidence of influenza which has always, in this district, been accompanied by a high pneumonia death rate. In 1934 there was no evidence of an increase of influenza to account for the increase in the virulence of pneumonia for that year. In 1935, there was a further raise in the first eleven months showing 3,368 deaths as compared to 3,132 deaths for the first eleven months of 1934. This was an increase of about 7.5 per cent. Figures available, but not yet compiled, show that the increase was continuous during the early part of 1936."

The manufacture of antipneumococcic sera has been carried on in the department laboratories since July 1, 1935, when the legislature appropriated \$10,000 a year for two years of research. Sixty pneumonia typing stations have already been established, and it is planned to increase this number to one hundred. Antipneumococcic sera will be distributed by late autumn, it is planned, from typing stations to physicians only after typing has been done so that specific type serum can be dispensed. Dr. Young expressed the conviction that state-wide free distribution would be under way by next spring.

Clinical studies will be carried on throughout the state and intensively in the Detroit Receiving Hospital. The use of new therapeutic agents and of antibody for other types than I and II will be in the Detroit Receiving Hospital on an alternate treated and untreated case sequence. The most important part of the clinical phase of the study will be the collection and analysis of case reports.

While several channels of research are open, Dr. Young declared that special effort would be made to improve the antibody by perfecting methods for the immunization of horses, and by an intensive study of the chemical nature of pneumococcal anti-

body looking toward the removal of the chill fraction, a higher concentration of antibody sera, the purification of antibody by means of bacterial enzymes, improved methods for testing the potency of therapeutic antipneumococcic serum, and the development of serums for pneumococci of types other than I and II.

Only Massachusetts and New York, in addition to Michigan, produce anti-pneumonia sera in state laboratories at present. The Commonwealth grant will be the first received by the Michigan laboratories for pure scientific research.

Current Deaths for First Four Months of 1936

Total deaths in Michigan for the first four months of 1936 increased by 475 over the corresponding period for last year with decided increases in deaths from pneumonia, heart disease and infant diarrhea, according to statistics released by Dr. C. C. Slemons, commissioner of health. Deaths totaled 19,048 for that period compared with 27,576 births. There was a decrease of 725 births over 1935.

Pneumonia, replacing cancer as the second major cause of death, continued its alarming rise of the past two years with 2,079 deaths already recorded, an increase of 175 deaths. Pneumonia deaths showed a 24 per cent increase in 1934, jumped an additional 7.5 per cent last year, and indications are that this year will furnish a further increase. The \$50,400 pneumonia research grant to the Michigan Department of Health for the development of practical, effective anti-pneumonia serum will be especially appropriate in view of this high incidence.

There were 1,607 deaths of children under one year of age which is equivalent to an infant mortality rate of 58.2 per 1,000 births for the four months. A rate of 47.7 prevailed in 1935.

Aside from premature birth, which is the highest single cause of infant deaths, the respiratory and diarrheal diseases are both high and the increased incidence of these diseases accounts in a large measure for this increase.

Diarrhea and enteritis deaths of infants under two years of age exceeded the figures for 1935. While the numbers in themselves are not large, they do indicate a trend coming at the season of the year when the incidence of the disease is not usually high. There were 94 deaths for the first four months compared with 62 last year. These diseases reach their peak usually during the hot summer months, and are best governed by care in control of the milk supply and environmental factors.

Heart disease, showing a total of 3,788 deaths, continued to be the leading cause of death, with an increase of 353 over 1935. Cancer continued in third place with 1,772 deaths. Deaths from heart disease, pneumonia, cancer, apoplexy and nephritis equaled more than half of the total recorded for all causes.

Automobile deaths for the first four months totaled 425; suicides, 207; homicides, 51; accidents exclusive of automobile, 706; tuberculosis, 681; diabetes, 459; puerperal causes, 162; diphtheria, 11; and typhoid fever, 7.

Look Out for the Uncommon Communicable Diseases

Certain of the communicable diseases either have never become very prevalent or the incidence has been so reduced that the number of cases in the state is relatively small and a physician in general practice seldom if ever sees a case. A pin map in the office of the Michigan Department of Health shows the incidence of some diseases which fall in

this group. The diseases, together with the number of cases reported for the year 1935, are as follows:

Amebic Dysentery	40
Epidemic Encephalitis	31
Malaria	82
Meningococcus Meningitis	113
Ophthalmia	12
Poliomyelitis	618
Smallpox	16
Trachoma	14
Trichina	23
Tularemia	11
Undulant Fever	73

To this group might be added typhoid and diphtheria inasmuch as the number of cases of typhoid in 1935 was 355 and the number of cases of diphtheria was 645. This means that about one doctor in ten, or less, had the opportunity of seeing a case, with some physicians, of course, seeing several, especially where several cases happened to occur in one family. Physicians generally should be reminded that all of these diseases are among those which should be reported promptly to the local health officer.

But more to the point—we suggest that physicians be particularly on the alert to avoid overlooking diagnoses. The more rare a disease may be the more likely is the diagnosis to be overlooked.

There is no reason at present to anticipate a "big year" in poliomyelitis. However, this is the season when prevalence is greatest. Last year the number of cases reported was considerably above the average. Many cases were diagnosed and reported in which there never was evidence of paralysis. No doubt this may also mean that there is an increase in the number of cases improperly diagnosed as poliomyelitis. Nevertheless, a greater proportion of nonparalytic cases among those reported indicates a greater alertness and understanding on the part of physicians.

Attention was called, through this column some months ago, to the increased prevalence of meningococcal meningitis noted through the United States for a period of more than one year. For the first six months of 1936 the number of cases was about 50 per cent more than for the same period in 1935. However, recently the incidence has been rather stationary or perhaps slightly on the decline.

A disease of which there is still a lesser incidence is epidemic encephalitis. Although Type A and Type B virus causing epidemic encephalitis have already been recognized, in the usual sporadic case it is not possible to definitely diagnose the case according to type. The three diseases, poliomyelitis, meningitis and encephalitis are sometimes confused in diagnoses, although with proper clinical and laboratory observations and examinations there should be little difficulty in most cases.

The smallpox incidence is low throughout the United States, but the especially low incidence in Michigan is remarkable. It is also worthy of note that few of the cases reported as smallpox are typical in clinical and epidemiological aspects.

The incidence of amebic dysentery has "leveled off" during the last two years since the outbreak originating in Chicago at the time of the World's Fair. No doubt there are many cases of this disease in which the diagnosis is missed. A persistent diarrhea with blood and mucus in the stools should always bring up the question of amebiasis.

Malaria is perhaps more common in Michigan than is usually considered by most physicians. It cannot be said that all cases are imported even though foci of infection are usually cases coming from southern areas. In Michigan the quadrimaculatus mosquito does transmit malaria from one individual to another.

Tularemia first came into prominence several

years ago. For a while it was thought and feared that this disease was on the increase, but although it has been brought to the attention of the medical profession, the number of reported cases has not increased during the last few years. The few cases which are reported usually come to light during the hunting season.

Although more cases of undulant fever have been diagnosed and reported in the past three or four years than at any time previous, we do not consider that this represents any real increase in incidence but rather a better diagnosing and reporting.

Although only 23 cases of trichina were reported during 1935, there has occurred in one outbreak in a northern community of the state since January 1, 1936, a total of 32 cases. This outbreak was referred to in the May issue of this JOURNAL. The gastro-intestinal symptoms which may first appear in these cases may furnish little clue as to diagnosis, but after the parasite has become encysted in the muscles, muscular pain and the swelling which occur at various parts of the body should always arouse the alert physician to the possibility of trichina.

The very low incidence of blindness in state institutions and elsewhere which can possibly be attributed to gonorrheal infection at birth as a cause, is convincing evidence of the value of silver nitrate prophylaxis in the eyes of the newborn. Not all irritations of the conjunctiva in infants are due to the gonococcus by any means, but the physician, even though he has used silver nitrate, should always consider the possibility of gonorrheal infection whenever conjunctivitis occurs in a baby.

Trachoma, another infectious and reportable disease of the eye or conjunctiva is, according to the reported cases, about as rare as ophthalmia neonatorum. A number of cases have occurred among Indians. Some ophthalmologists are of the opinion that this disease is much more common than is generally recognized. The importance of recognizing promptly the diagnosis in cases of diphtheria has been stressed for many years. Perhaps it needs to be stressed again considering the low incidence and the seldomness of any physician seeing a case.

The typhoid fever season is on hand. Unfortunately, the average case is not recognized until after two weeks from onset during which time there usually has been no care at all to prevent spread of infection. Although a delay of this length of time may be excusable in some cases, yet continued failure to recognize the typical typhoid case during the three or four weeks of illness is not excusable. The disease may also be classified as rare. Even more to be censured is the failure to report the case promptly to the local health officer so that proper steps may be taken to prevent the further spread of infection.

Northern Michigan Tuberculosis Sanatorium at Gaylord

Engineers from the State Department of Health have started staking out the buildings at the new State Sanatorium at Gaylord and we expect work will start on the construction within a few days.

The liner quivered from stem to stern, and then with a harsh grating sound it came to a full stop.

A man in a long, flowing white nightshirt appeared from a cabin and dashed up to a steward. "What's happened?" he shouted. "Have we struck an iceberg? Shall I get into my lifebelt? Won't you lower the boats?"

"Too late," the steward answered. "We've done all we can for you, and you'll have to look out for yourself now. You see, we've just tied up in dock."—Anon.

GENERAL NEWS AND ANNOUNCEMENTS

The One Hundred Per Cent Club of the Michigan State Medical Society

composed of county medical societies which have paid dues in full for each and every member of the county and state medical societies, now totals twenty-three societies:

1. Alpena County Medical Society
2. Eaton County Medical Society
3. Gogebic County Medical Society
4. Grand Traverse-Leelanau-Benzie Medical Society.
5. Hillsdale County Medical Society
6. Ingham County Medical Society
7. Lenawee County Medical Society
8. Luce County Medical Society
9. Manistee County Medical Society
10. Mecosta-Osceola County Medical Society
11. Midland County Medical Society
12. Muskegon County Medical Society
13. Newaygo County Medical Society
14. Northern Michigan Medical Society
15. Oceana County Medical Society
16. Ontonagon County Medical Society
17. Ottawa County Medical Society
18. Saginaw County Medical Society
19. Saint Clair County Medical Society
20. Schoolcraft County Medical Society
21. Shiawassee County Medical Society
22. Tuscola County Medical Society
23. O. M. C. O. R. O. Medical Society

Medical History of Michigan. Two volumes. Price reduced to \$5.00 for both volumes. Write the Executive Office, 2020 Olds Tower, Lansing.

* * *

Dr. C. C. Slemons, Health Commissioner of the State of Michigan, was honored in Vancouver on June 26 by election to the Executive Committee of the State Provincial Health Authorities. Congratulations!

* * *

Opportunity for a general practitioner in Charlevoix County. Excellent opening, as a physician with a good practice is going into a specialty. For details, contact the Executive Office, 2020 Olds Tower, Lansing.

* * *

The Wayne County Medical Society Club rooms will be available to doctors attending the seventy-first annual meeting of the Michigan State Medical Society, September 21-24. There will be ample parking facilities within a stone's throw of the club house, 4421 Woodward Avenue, corner of Canfield.

* * *

A Delegate of the Michigan State Medical Society is eligible to any elective office in the Society, according to the ruling of the House of Delegates at its 1935 meeting. This was published in *THE JOURNAL*, Michigan State Medical Society, pages 735-736, November, 1935, issue.

* * *

The Wayne County Medical Society's Seventh Annual Golf Tournament will be held at Birmingham Golf Club on Wednesday, August 26, 1936. This event usually attracts about 250 golfers, and is a splendid social gathering of medical men. Wm.

J. Burns, Executive Secretary of the Michigan State Medical Society, has been invited to be Toastmaster.

* * *

Public Invited: The 125 Exhibits at the Detroit Annual Meeting of the Michigan State Medical Society will be open to the public on Tuesday afternoon, September 22, according to decision of Executive Committee of The Council at its meeting of July 1. These Scientific and Technical Exhibits carry much information and medical instruction, in which the public is tremendously interested.

* * *

The Brochure of the Michigan State Medical Society, "Who Wants Socialized or State Medicine?" has been received from the printer. A copy will be sent to every member of the Society, and to every school, library, Y. M. C. A., Y. W. C. A., civic organization, women's club. If you desire a copy to be sent to any office holder or citizen in your community, merely drop a postal to your Executive Office, 2020 Olds Tower, Lansing.

* * *

Who are the presidents and secretaries of the Michigan alumni associations of:

1. Phi Rho Sigma Fraternity?
2. Nu Sigma Nu Fraternity?
3. Omega Upsilon Phi Fraternity?
4. Theta Kappa Psi Fraternity?
5. Phi Alpha Sigma Fraternity?
6. Phi Chi Fraternity?

This information will be appreciated if sent to the Executive Office of the Michigan State Medical Society, 2020 Olds Tower, Lansing.

* * *

Gratuitous Services: Article 25 of the Rules Governing Gratuitous Medical Services in Hospitals, Clinics and Community Projects and Their Relation to Medical Practice, adopted by the Des Moines (Polk County) Medical Society, Iowa, on June 23, 1936, states that:

"Each member of the Des Moines Academy of Medicine and Polk County Medical Society shall submit for review by the Board of Censors of the Society a list of all those hospitals, out-patient departments, clinics and organizations to which he gives gratuitous medical service."

* * *

By Badge: Admissions to the General Sessions at the 71st Annual Meeting of the Michigan State Medical Society, Book-Cadillac Hotel, Detroit, September 21 to 24, 1936, will be by badge only.

This ruling is made to protect members of the Michigan State Medical Society, who otherwise might be crowded out by others who wish to attend the various functions of the meeting. This rule will apply also to the Smoker, planned by the Wayne County Medical Society for Tuesday, September 22, 8:00 p. m. Monitors will be stationed at all doors to see that this rule is carried out.

* * *

The Annual Meetings of the Michigan State Medical Society during the last ten years were held in numerous communities of the state:

- 1926—Lansing
- 1927—Mackinac Island
- 1928—Detroit
- 1929—Jackson
- 1930—Benton Harbor
- 1931—Pontiac
- 1932—Kalamazoo
- 1933—Grand Rapids
- 1934—Battle Creek
- 1935—Sault Ste. Marie
- 1936—Detroit

Coming events cast their shadows:

August 15, 1936—First day a voter may make application for Absent Voters Primary Ballot.

August 26, 1936—Last day for Registration prior to General Primary Election.

September 15, 1936—General Primary Election.

October 14, 1936—Last day for Registration prior to General November Election.

November 3, 1936—General November Election. (Two amendments to the State Constitution to be voted on. Joint Res. 2 and 3, P. A. 1935; and any other amendments that may be initiated.)

January, 1937—Legislature convenes in Regular Session. (Membership: Senate—32 members; House—100 members.)

* * *

"We look forward to the annual meeting of the Michigan State Medical Society in September as we understand that it is one of the best state meetings, and in Detroit the attendance should be excellent."

This came from one of the exhibitors located in Rochester, New York, who will have two booths at the 71st Annual Convention and Exhibition of the Michigan State Medical Society in Detroit, September 21, 22, 23 and 24, 1936.

One hundred twenty-five (125) Scientific and Technical Exhibits will be gathered together for the information and delectation of the members who will attend this meeting. It is estimated that the registration will be 2,000 and over.

Better write for your hotel reservation now. One hotel is sold out.

* * *

Dr. James Tate Mason of Seattle, president of the American Medical Association, died June 20, 1936, of endocarditis with multiple emboli at the age of fifty-four. Dr. Mason was born in Virginia and graduated from the University of Virginia Department of Medicine, in 1905. He was made president-elect of the American Medical Association at the annual meeting in 1935. His physical condition prevented him from attending the 1936 session at Kansas City. However, he was made president in absentia. Dr. Mason was a member of the House of Delegates of the American Medical Association from 1928 to 1934. He was secretary of the division on Surgery, General and Abdominal, from 1923 to 1926, when he was elected chairman, serving a year in that capacity. He will be succeeded by the vice president, Dr. C. G. Heyd.

* * *

This is no fairy tale: A certain member, following the suggestion made in the July issue of THE JOURNAL, sent to the State Society's Executive Office a list of concerns whose representatives call upon him every month. Some of these firms, whose products have the approval of the American Medical Association Council on Pharmacy and Chemistry, were invited to exhibit at the Detroit Meeting of the Michigan State Medical Society in September. Result: two spaces were sold.

This physician deserves the thanks of the entire membership for his very practical interest in the success of the Society.

Doctor, in your contacts with detail men, please mention the Exhibit of the Michigan State Medical Society, Detroit Session, September, 1936; also men-

tion "The Detroit Number" of THE JOURNAL—September issue, which will be a souvenir program of your Annual Meeting.

* * *

The Golfers of the Michigan State Medical Society are invited for invitational golf at the Detroit Golf Club, Tuesday, September 22, on the occasion of the Annual Convention of the M.S.M.S. The Detroit Golf Club is at Ponchartrain Drive, just opposite Palmer Woods, between the Six and Seven Mile Roads. There are ample parking facilities for golfers driving their own cars.

Pay the regular green fees of \$1.50 and buy coupon books at the Club to pay for green fees, dinners, caddies, etc. Any coupons left over will be refunded at the Cashier's office before leaving the club. Guests cannot pay with cash, only with coupon books or upon signature of a member of the Club.

The dinner will be \$1.65, including the service charge, and will be served at 6:30 promptly, so the men can get back to the Book-Cadillac for the "smoker" which begins at 8 o'clock. Buses will be arranged for the men not driving their own cars. The fee is nominal.

Buses will leave from both the Book-Cadillac and the Statler for the Detroit Golf Club, and will be at the Golf Club promptly at 7:30 to return the men to the Book-Cadillac. Suitable prizes will be presented during the dinner. You are invited!

C. D. BROOKS, M.D.
Chairman Golf Committee

* * *

Afflicted child commitments for the month of June, 1936, totaled 903, of which 259 were committed to the University Hospital. This compares with 1325 commitments in May, 1936, of which 262 were sent to the University Hospital; and to 1200 in April, 1936, of which 311 were University Hospital patients.

Crippled child commitments for June were 256, of which 93 went to the University Hospital. In May, the total of crippled child commitments was 255, with 91 to the University Hospital; in April, the total was 243, with 102 going to the University Hospital.

The maximum total cost for physicians' fees for June, 1936, for cases in hospitals other than the University Hospital, would have been no more than \$28,210 (basing the average cost per case of both crippled and afflicted children at the figure of \$35). In May, 1936, on the same basis, the maximum total cost for physicians' fees would have been \$42,845. In April, 1936, the total would have been \$36,050.

These cost figures are all below the estimate of \$50,000 per month which was given to the Governor last March by the Chairman of the Michigan State Medical Society Subcommittee on Relief Medicine. The Filter System is working!

* * *

The University of Michigan and the Children's Fund of Michigan will hold a conference of the health profession at Marquette on August 19 and 20. This meeting will be preliminary to and in conjunction with the annual meeting of the Upper Peninsula Medical Society at Ishpeming, Michigan, on August 20 and 21. The joint program of the University of Michigan and the Children's Fund of Michigan is as follows:

Wednesday, August 19, 1936
Marquette High School
2:00 P. M.

F. C. Bandy, M.D., Presiding

The Division of the Health Sciences at the University of Michigan—Dr. James D. Bruce, Ann Arbor Symposium. What Constitutes a Complete Health Service for the Community?

Medicine—Dr. Hugo A. Freund, Detroit
Nursing—Miss Louise Knapp, R.N., Prof. of Public Health Nursing, Wayne University
Pharmacy—Dr. Howard B. Lewis, Director of College of Pharmacy, University of Michigan
Dentistry—Dr. Paul Jeserich, Professor of Dentistry, University of Michigan
Public Health—Dr. John Sundwall, Director of the Division of Hygiene and Public Health, University of Michigan
Discussion

Wednesday Evening. Public Cordially Invited
Marquette High School Auditorium
7:30 P. M.

W. A. Manthei, M.D., Presiding

An Illustrated Lecture on the Present Knowledge of the Cause and Care of Cancer—Dr. Henry J. Vanden Berg, Grand Rapids

Growing Up Mentally—Dr. Howard Y. McClusky, Associate Professor of Educational Psychology, University of Michigan

Thursday, August 20

Dentistry

Northern Michigan Children's Clinic. Amphitheatre

Some Aspects of a Full Denture Practice, including a Motion Picture of Immediate Denture Service. Lecture and Clinic—Dr. C. H. Jamieson, Detroit, Michigan

Practical Pediaodontia for the General Practitioner. Lecture and Clinic—Dr. George E. Morgan, Milwaukee, Wisconsin

Etiology and Management of Chronic Arthritis—Dr. A. C. Curtis, Ann Arbor, Michigan

Thursday, August 20

Conference on Public Health and Nursing
Graveraet High School

Miss Elba Morse, Presiding

The Obstetrics Problem—Professor Norman F. Miller, University of Michigan Medical School, Ann Arbor

The Further Consideration of Community Health Services.

Panel Discussion. Miss Louise Knapp, Presiding
Professor John Sundwall

Dr. Clyde C. Slemmons, State Commissioner of Health, Lansing

Professor Howard McClusky

Miss Marjorie Delavan, Director, Bureau of Education, State Department of Health, Lansing

AUGUST, 1936

OBITUARY

Dr. E. P. Mills

Dr. E. P. Mills of Highland Park died at the Highland Park General Hospital July 9, 1936. Dr. Mills was born on October 8, 1875. After attending the Detroit Business University, he entered the Detroit College of Medicine and graduated M.D. in 1898. Since that time, Dr. Mills had devoted his time to general practice. Dr. Mills will be missed from the Wayne County Medical Society where he was a constant attendant; always of a cheerful disposition, leaving the impression that he enjoyed life supremely, Dr. Mills could be depended upon to engineer any entertainment the society might undertake. He was a Knight Templar Mason, and also a member of the Moslem Shrine, which membership went to show his fraternal tendencies in a large way. Dr. Mills is survived by his wife, Minerva E.; one daughter, Lillian F.; and one son, Ellsworth P. Mills of Cleveland.

Dr. Daniel O. Donovan

Dr. Daniel O. Donovan died on July 13, 1936, his end being brought about by the excessive temperature that week. He was born in Chatham, Ontario, in 1853 and came to Detroit in 1881. His preliminary education was received in Chatham and Toronto. However, he graduated from the University of Michigan M.D. in 1876. He began practice in Manistee, but eventually came to Detroit. Dr. Donovan had practiced sixty years last June. He is survived by three daughters and one son, Dr. Daniel R. Donovan of Detroit.

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column and this will be deemed by us a full compensation to those sending them. A selection will be made for review, as expedient.

EXOPHTHALMIC GOITER AND ITS MEDICAL TREATMENT. By Israel Bram, M.D., Medical Director, Bram Institute for the Treatment of Goiter and other Diseases of the Ductless Glands, Upland, Pa.; Member of the Association for the Study of Internal Secretions, the American Association for the Study of Goiter, etc. With foreword by R. G. Hoskins, Ph.D., M.D., Director of Research, Memorial Foundation for Neuro-Endocrine Research, Harvard Medical School, Boston, Mass. 456 pages. Price, \$6.00. St. Louis: C. V. Mosby Co., 1936.

This is a rather pretentious volume of over 400 pages which details the author's personal experience with over 5,000 cases of exophthalmic goiter treated non-surgically. The book is essentially an attempt to justify non-surgical treatment of this incompletely understood disease, the first 170 pages of which are devoted to symptomatology. There is a short discussion of types and laboratory tests and the remainder of the book is devoted to management: general principles, local measures, drugs and psychotherapy. The last sixty-odd pages are devoted to an evaluation of treatment as measured by a follow-up of 2,600 cases, only 55 of which are sketchily summarized. This book constitutes an undue emphasis on medical management of exophthalmic goiter to the exclusion of thyroidectomy, which is still recognized generally as the most important single procedure in the treatment of this disease.

SYNOPSIS OF DISEASES OF THE HEART AND ARTERIES. By George R. Herrmann, M.D., Ph.D., Member Association of American Physicians, American Climatological and Clinical Association, American Society for Clinical Investigation, American Society for Experimental Biology and Medicine; Fellow American Association for the Advancement of Science, American College of Physicians and the American Heart Association; Miembro Correspondiente Extranjero de la Sociedad Mexicana de Cardiología. 88 Text Illustrations and 3 Color Plates. Price, \$4.00. St. Louis: C. V. Mosby Co., 1936.

This is a work by George R. Herrmann, a graduate of the University of Michigan, and formerly associated with the medical faculty there, and now Professor of Clinical Medicine in the University of Texas. The book comprises 328 pages divided into 24 chapters. It is illustrated with 88 photographs, diagrams and other figures, and three color plates. The book is, frankly, an attempt to make information on cardiology available to him who runs. The work is carefully indexed and interspersed with outlines and there is more than usual emphasis on treatment and much of this material is in tabular form. The mechanics of disturbed physiology as the basis for symptomatology is clearly outlined. Particularly valuable is a chapter entitled, "The Classification of Diseases of the Heart," and the last chapter on "Peripheral Vascular Diseases is one which should be read by every general practitioner. There are chapters on "Disturbances of Myocardial Function," on "Congestive Heart Failure," which is followed by a 13-page chapter on detailed treatment. There are chapters on "Anginal Heart Failure," "Coronary Thrombosis," "Sub-acute Bacterial Endocarditis," "Rheumatic Carditis," and the usual brief summary of the valvular diseases.

The book is pocket size and thoroughly sound from cover to cover; an excellent volume to keep on your handiest shelf.

FACTS ABOUT COMMERCIALLY CANNED FOODS.

A brochure prepared and copyrighted 1936 by the American Can Company. The educational material in this book is acceptable to the Committee on Foods of the American Medical Association. Booklet on request by writing the American Can Company, 230 Park Avenue, New York, New York.

Prepared primarily to inform the public, this booklet of 34 pages has information which will interest many physicians. The chapters on "Food in the Open Can" and "The 'Ptomaines'" are designed obviously for lay consumption, but the chapters on "Vitamins in Canned Foods" and "Canned Foods in Infant Nutrition" are well worthy of attention by the M.D. The material is well written, and the technical processes of canning and sterilization are explained in simple, readily understandable English. The treatise on Botulism is one that should be called to the attention of all patients.

Coronary Artery Disease in Women

Hyman Levy and Ernest P. Boas, New York (*Journal A. M. A.*, July 11, 1936), state that in women, especially those under the age of 50, coronary artery disease is unusual in the absence of diabetes or hypertension. Yet precordial pain simulating angina pectoris is a common symptom. Although experienced clinicians have been aware of this fact for years, it is overlooked again and again in daily practice and many mistaken diagnoses result. During the last seven years in an office practice representing largely patients referred for cardiovascular diagnosis, the authors have seen 1,672 women, 169 of whom had coronary artery disease. In the same period they saw 2,135 men, 1,059 of whom had coronary artery disease. The frequency is 4.9 times as great in men as in women. Of the 169 cases in women, 125 were associated with hypertension alone, twenty-five with both diabetes and hypertension, and six with diabetes alone. In only thirteen cases was there neither hypertension nor diabetes, and of these only five were in women under the age of 50. The clinical picture of true coronary artery disease as it occurs in women does not differ from the generally recognized form. The relative unusualness of coronary artery disease and the frequency of benign precordial pain in women should lead to great caution in the diagnosis of coronary artery disease in women in the absence of hypertension or diabetes. This applies as well to many women in the fifth decade of life with unstable blood pressures and transient rises to 160 or 170 millimeters of mercury. The fluctuating blood pressure level may be only one expression of the many vasomotor instabilities associated with the menopause and does not have the same significance as a maintained arterial hypertension. Even in the presence of hypertension in women, true angina pectoris is much less frequent than is benign precordial pain. However, coronary artery disease does occur at times in women with normal blood pressures who are free from diabetes, particularly in women over the age of 60 who have generalized arteriosclerosis. Isolated cases in young women in the absence of both hypertension and diabetes have been reported. Averbuck has pointed out that "when the clinical picture suggesting coronary artery thrombosis occurs in a female patient who has neither arterial hypertension nor diabetes, a pulmonary embolus should be suspected." Hypertension is not the cause of coronary disease but simply accelerates its development. The designation "hypertensive cardiovascular disease," so commonly employed to describe these disease states, is a poor term. It assumes a necessary and fundamental connection between the two disorders. Their true nature can best be discovered by studying uncomplicated coronary artery disease in men and uncomplicated arterial hypertension in women. These apparently represent "pure forms" of these two conditions.

OF MEDICAL AND SURGICAL INTEREST

Radiologic Investigation of Superior Maxillary Antrum

E. H. Shannon, Toronto, Ont. (*Journal A. M. A.*, Feb. 22, 1936), states that in 130 cases chronic maxillary sinusitis with more or less well marked mucosal thickening was the major observation. In 127 cases the diagnosis was confirmed. In eighteen cases of the 127, polyps of small size were found at operation which had not been seen roentgenographically. Three cases considered acute by roentgen examination were found to be of chronic type. Of 106 cases polypoid degeneration was reported as the outstanding feature and with subsequent operative confirmation. Four antrums in which polyps were reported were found to contain cysts. Of the 102 remaining, in two instances pus was reported to be present in quantity and was not evident to the surgeon; in four pus in quantity was found and had not been reported; in two cases polyps of a centimeter or more in diameter were removed when only mucosal thickenings had been reported. Thirty-eight cases were described as showing evidence of barely demonstrable osteitic reaction, with no definite mucosal thickening, pus or polyps present. They were considered as representing residual changes from an old infection not active at the time of examination. Of this group six contained one or more very small polyps, not visible preoperatively or on re-examination of the films. In twenty-two cases, frank empyema was reported and confirmed at operation. Of these, ten were reported by the surgeon to have contained polyps, the presence of which was entirely masked in the roentgenograms by the contained pus. A survey of the tabulated results of these cases indicates that the radiologic diagnosis of chronic maxillary sinusitis made on "plain" roentgenograms was essentially correct in almost every instance. The author believes that the presence of polyps in an antrum containing definite mucosal thickening, especially if an osteitic reaction is present, does not materially alter the clinical conduct of the case. In the thirty-eight cases of the 296 described as representing the end-result of an old healed infection, this may not apply. They form the borderline group, and it will be seen that, while definite evidence of disease was not lacking, a detailed description of the pathologic changes present was not accurate in six of thirty-eight antrums examined. In this group only a slight haziness was observed radiologically over the suspected antrum, with no definite pus or polyp formation evident. The periosteum in several instances was apparently thickened, while at operation the mucous membrane was found to be adherent; the bone bled readily and was hard to the curet. The author feels that the knowledge of the presence of even slight polypoid degeneration of the mucosa might influence treatment in such cases as indicating the probability of reinfection when healing was considered to have occurred. At present, he is studying the ethmoidal cells closely for a clue as to similar change occurring in that area, where it is more readily demonstrable. If doubt still exists an opaque medium may well be used to fill the antrum, by whatever method is preferred by the operator. The preliminary plain films will then establish the presence of minimal osteitic reaction; the iodized oil may reveal the slight associated polypoid degeneration of the mucous membrane.

Value of Atropine and Belladonna in Stomach Disorders

Walter A. Bastedo, New York (*Journal A. M. A.*, Jan. 11, 1936), declares that the action of atropine on the stomach is peripheral, but it is obtained only after the absorption of the drug. Maximal doses for man may be considered those that just produce undesirable by-effects. With the enormous doses possible in experimental animals, atropine may reduce and even abolish the secretion of gastric juice. In man the maximal possible doses tend to reduce the psychic phase and possibly the intestinal phase of gastric secretion and thereby to reduce the total secretion. They also tend to reduce the continuous interdigestive secretion for two or three hours, but not long enough to make atropine a satisfactory night dose in ulcer. In the chemical phase, doses large enough to cause toxic reactions may bring about a distinct reduction in the amount of secretion, though this is not a constant effect. The reduction in quantity may be accompanied by a reduction in the acid titer, but in many instances it is associated with a much smaller proportionate reduction in the total acid secreted, thereby making a more strongly acid solution in the stomach than normal. Doses that reduce the acid secretion also reduce the secretion of the protective mucin. The effect on the stomach secretion is short lived, one or two hours as a rule, while the undesirable toxic effects persist. In man, in a small proportion of the cases, the largest permissible doses may overcome hypertonus, hyperperistalsis and spasm in the body of the stomach; yet they may be harmful, in that they abolish the normal vagus reflexes which control motor hyperactivity. In pylorospasm, if the dose is large enough, those forms which are motivated by the vagus may be overcome, but not those motivated by the splanchnic nerves. In chronic ulcer the atrophic value of the vagus cannot be abolished with impunity, but, except for the evidence of Aschoff, it is not known to what extent atropine affects this. It is yet to be determined whether, as Palmer suggested, the appearance of side actions may be accepted as the indication that the stomach is being acted on, and their non-appearance the indication that the stomach is not affected. The minimal single doses that promise any effect on the stomach are 1 mg. (1/65 grain) of atropine sulfate by hypodermic injection, and 3 c.c. (45 minims) of tincture of belladonna or 75 mg. (1 1/6 grains) of the extract by mouth. In susceptible patients, doses much smaller than these produce the undesired side actions.

Use of X-rays in Pulmonary Tuberculosis From Point of View of Prognosis

Francis B. Trudeau, Saranac Lake, N. Y. (*Journal A. M. A.*, Feb. 22, 1936), devotes his discussion to the following points in relation to their effect on prognosis: extent of disease as based on the roentgen examination; character and types of shadows; absence or presence of cavities; behavior of cavities; increase or decrease of roentgen shadows; prognostic significance of fever versus roentgen shadows, fever versus comparative roentgen studies and râles versus roentgen shadows, and relapse in relation to comparative roentgen studies. In order to obtain some statistics on these various points he has selected groups of several hundred consecutive admissions to Trudeau Sanatorium, studied the roentgenograms

of these patients, and then followed the patients in each group for a period of years. The study indicates that: 1. The extent of involvement of the lung greatly influences the prognosis in pulmonary tuberculosis, the death rate being in direct proportion to the amount of disease. 2. The prognosis in the "exudative" type of disease is decidedly more unfavorable than in the "proliferative" type. 3. The presence of cavities nearly doubles the probability of death within five years. 4. Cavity cases showing improvement under treatment have approximately five times as favorable a prognosis as those in which the cavities become larger during sanatorium residence. 5. Patients whose comparative roentgen examinations are constantly favorable under sanatorium treatment have more than twice as good a chance of being well at the end of five years and only one fourth as great a chance of being dead as those who have increased roentgen shadows. 6. Increase in comparative roentgen studies suggests a prognosis about equally unfavorable with that indicated by the presence of fever. 7. Patients with both fever and increased roentgen shadows have six times as unfavorable an outlook as those who are free of fever and whose roentgen examinations show consistent improvement. 8. Increased comparative roentgen shadows are of much graver prognostic significance than increased physical signs (râles). 9. The yearly follow-up records of 600 patients show that the relation of "well," "relapsed but now well," "chronic," and "dead" is in direct ratio to the incidence of roentgen increases while they were under the author's care.

Etiology of Heart Disease, With Especial Reference to Present Status of Prevention of Heart Disease

Howard B. Sprague and Paul D. White, Boston (*Journal A. M. A.*, Nov. 2, 1935), state that Cabot attributed the four common types of heart disease to rheumatism, syphilis, hypertension and arteriosclerosis (the status and prevention of which are discussed separately), and these remain the causes of nine-tenths of the organic heart disease of the United States. In the remaining one-tenth are found such diverse types of heart affliction as congenital, thyroid, acute and subacute bacterial, diphtheritic and toxic heart disease, and the damage to the heart produced by pulmonic hypertension, anemia, trauma, systemic disease and neoplasms. While it is true that heart disease is now thought of in terms of etiology as one of the elements of the triad of diagnosis—etiological, structural and functional—one must not be satisfied to confuse knowledge with nomenclature, since it must be admitted that in the four major types of heart disease the pathogenesis is obscure in more than 90 per cent. The causes of rheumatism, hypertension and arteriosclerosis are unproved and in this ignorance of the causes lies to date much of the failure of preventive medicine in heart disease. In the 10 per cent of heart disease with assorted etiology the possibility of prevention depends on the underlying conditions, many of which are remediable; but, except in goitrous districts with an abnormal incidence of thyroid heart disease, not one of these minor groups presents a public health problem of any great importance. On the other hand, the four major groups constitute a preponderant problem since they are responsible for two and a quarter times as many deaths as their nearest rival, cancer. Three of them—rheumatic, syphilitic and hypertensive—may eventually become amenable to preventive measures and even the fourth—arteriosclerotic—may be so controlled that it will cause serious damage only in the aged.

The Additive Effect of Calcium and Digitalis: Warning, With Report of Two Deaths

J. O. Bower and H. A. K. Mengle, Philadelphia (*Journal A. M. A.*, April 4, 1936), report two fatal cases following the intramuscular administration of digitalis and the intravenous injection of calcium gluconate chloride because of their conviction that there are very definite contraindications to the use of calcium intravenously. Several causative factors were suggestive in case 1: liver damage, autonomic instability, speed shock, and the synergistic action of calcium and digitalis. Although the liver at operation seemed soft and bled easily, at necropsy it was very flabby, and the liver function test showed 30 per cent retention, yet the pathologist's report hardly justifies classifying this case as a death due to hepatic insufficiency. Autonomic instability is a vague term and while there are undoubtedly instances in which death is due to some powerful stimulation of the autonomic nervous system, there is too great a tendency to ascribe catastrophes to some such vague generalization. Every one is to some degree either vagotonic or sympathotonic, and even in cases of recognized pronounced instability some additional stimulus is required to produce a fatality. Physiologists and pharmacologists have long known that excess of calcium ions slows the heart rate and that large doses will stop the heart in systole. In an endeavor to confirm the results of others, the authors studied the effects of large but sublethal doses of calcium chloride, calcium gluconate and digalen, administered intravenously. Dogs from stock and others especially prepared were used. Fifteen per cent of the calculated lethal dose of calcium chloride or gluconate produced only a transient slowing of the pulse and a slight drop in blood pressure. When this dose was preceded by therapeutic doses of digalen, i. e., sufficient to produce changes in the pulse or blood pressure, definite toxic effects were obtained. Periods of asystole, extrasystoles, marked slowing of the pulse and fibrillation were observed. Following the administration of digalen, approximately 30 to 40 per cent of the calculated lethal dose of calcium gluconate was given. After a brief rise in blood pressure there was an abrupt and dramatic cessation of heart action and the blood pressure fell to zero. Similar results were obtained with calcium chloride. After administration of sufficient calcium ions to produce definite circulatory changes digalen in large doses gave no such results, and only when the full lethal dose of digalen was reached did the blood pressure fall and the circulation fail. Five dogs were especially prepared by subtotal hepatectomy to simulate liver damage in case 1. While these dogs were more sensitive to small doses of either calcium ions or digalen than normal dogs, it is questionable whether their general physical condition was not to blame, rather than especial sensitivity produced by liver damage. Even with administration of dextros, these animals live only a few days after operation. Six dogs received chloroform anesthesia, one-half hour for two successive days, as a preliminary preparation, to produce liver damage. The results did not differ essentially from those obtained in normal animals. The authors feel that the results of these experiments, in conjunction with the reports of other writers, justify the conclusion that the administration of calcium salts intravenously, following the administration of digitalis or one of its purified proprietary modifications, is a procedure of considerable hazard and may result in avoidable fatalities. They suggest that manufacturers of calcium gluconate or chloride should preface their literature with a warning relative to the additive effect of calcium and digitalis when given simultaneously.

THE JOURNAL

OF THE

Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. 35

SEPTEMBER, 1936

No. 9

PRACTICAL CONSIDERATIONS IN GYNECOLOGIC SURGERY*

VIRGIL S. COUNSELLER, M.D.

Division of Surgery, The Mayo Clinic
ROCHESTER, MINNESOTA

It is an honor to be invited to deliver the W. J. Mayo lecture in surgery and I feel keenly the responsibility of maintaining the high standards established previously by my colleagues. It is difficult to retrace today the development of any phase of general surgery which Dr. Mayo has not profoundly influenced, since he began practice when surgery was in its infancy and from the beginning until the present has contributed enormously to the surgical literature. The first surgical report he gave was of some observations on ovarian tumors. This was followed subsequently by discussions of such gynecologic subjects as myoma of the uterus, menstrual function, hysterectomy, operations for prolapse of the uterus and vaginal walls, conservative gynecologic procedures, and the treatment of pelvic infections and tuberculosis and carcinoma of the uterus. For this reason it seemed proper to consider today some practical observations in gynecologic surgery which have been given us by our older colleagues and which can with benefit be repeated and reemphasized.

Some of you may feel that this subject does not merit much discussion, but others, who perhaps are more familiar with its aspects in general practice, feel the necessity of keeping it before the attention of the profession. You may ask why this is true. One very definite reason is that gynecology constitutes about 25 per cent of the average physician's practice. Furthermore, the mortality in pelvic surgery is definitely lower than for other types of abdominal surgery when the usual surgical principles and standardized technics are employed; thus the surgeon may not feel the same degree of hesitancy in undertaking pelvic operations that he shows, for instance, in undertaking oper-

ations in the upper portion of the abdomen. For these reasons pelvic operations are often performed when there is only the slightest indication for them, and at times when there is no real indication for them at all. It should be remembered that the mortality attending any operation reaches its maximum in the hands of inexpert or insufficiently trained men.

The late C. Jeff Miller has often quoted a remark, which was attributed to Howard Kelly, to the effect that surgery, developing in the hands of men, has dealt too lightly with mutilating operations on women, and that if the situation were reversed for several decades, women performing the operations and men suffering the mutilation, there would undoubtedly be a larger number of men than there are now in favor of less radical procedures. There is a tendency to disregard the fact that the whole scheme of existence of some women depends on the state of their pelvic organs.

In writing on the subject of menstrual function, W. J. Mayo said: "The generative organs of women are for the purpose of reproduction. The ovary controls the

*Read as the W. J. Mayo Lecture in Surgery, Ann Arbor, Michigan, April 24, 1936.

physiologic cycle, the uterus receives and carries the impregnated ovum to term. The uterus is often blamed for troubles with which it really has little to do. The curet is a much abused instrument. The endometrium is relatively seldom diseased and a high percentage of menstrual disturbances are ovarian and tubal in origin. A sufficient distinction is not made between irregular bleedings from the uterus and true menstruation. Menstrual blood does not clot. If the blood forms true clots, the endometrium may be suspected, otherwise the ovary."

Irregular uterine bleeding requires very careful study to distinguish between that from systemic disease, functional states, and from benign and malignant tumors. The curet is indeed a dangerous instrument and its use should largely be restricted to establishing a diagnosis except when it is necessary to evacuate the pregnant uterus. The gross appearance of a few pieces of endometrium, and the nature of the sensation transmitted by the curet as it scraped the lining of the uterus, to the experienced gynecologist is often sufficient for diagnosis without the necessity for a microscopic report. If pieces of endometrium are extruded from the uterus as the cervix is being dilated, the chance of malignancy of the fundus is great. The soft or smooth sensation transmitted by the curet and the ability to obtain only small amounts of endometrium suggest ovarian failure. If this condition is encountered in young women, hormone therapy may be indicated, but if the patients are beyond the menopause such treatment is not indicated.

The recent work of Herrell and Broders should be emphasized in this connection. They divide the menstrual cycle into two stages, the proliferative and the differentiative; the former extends from the first to the fourteenth day and corresponds to the life of the follicle of the ovary, and the latter extends from the fourteenth to the twenty-eighth day and corresponds to the life of the corpus luteum. Each of these two stages was then subdivided into an early and late phase, each having a duration of one week. In cases in which the menstrual cycle is normal, the histologic picture of the endometrium in any one of these stages is characteristic. Accordingly, it is possible to correlate the observed state of the endo-

metrium with the clinical picture, and this tends to clarify some of the poorly understood physiologic phenomena.

Whenever the solution of a problem is simplified there is a greater probability that the answer is correct. For example, if menorrhagia has persisted for several weeks and biopsy of the endometrium reveals it to be in the early proliferative phase, it is evident that the patient does not have sufficient follicular hormone to complete the proliferative stage. The condition is then designated as endometrium in the "persistent proliferative" stage and in cases in which a functional type of bleeding is present it is regarded as evidence of ovarian failure. Cystic areas in the endometrium which have heretofore been diagnosed as "hyperplasia" are now known to be attributable to inactivity of the corpus luteum. If this condition is encountered in women about forty years of age it is evidence of an early menopause and the value of treatment is questionable. Further support for this theory is given by the fact that a corpus luteum is not found in the ovaries of such patients when examined during hysterectomy. The curet, then, is of more value in diagnosis than in treatment.

Irregular bleeding at the menopause must be thoroughly investigated, since, although it may suggest a normal ovarian failure, carcinoma may be the chief etiologic factor. To disregard it as being only the normal physiologic change is a serious error, because, if the patient presents her case for treatment, the burden of proof rests entirely on the physician. The results of treating early carcinoma of the cervix by radium and the results of total hysterectomy for early carcinoma of the fundus are known by all to be good. Future efforts, therefore, must be directed toward maintaining and improving these results by early and accurate diagnosis.

The clinical picture in cases in which the patients are young may be complicated by chronic pelvic inflammatory disease, extrauterine pregnancy, fibroid tumors, uterine polyps, and cervicitis with erosion. A positive Friedman test is about 98 per cent accurate and is sufficient evidence of pregnancy. I have recently had under my care two patients with chronic pelvic infection who presented themselves because of pelvic pain and spotting. Pregnancy was not considered likely after five years of sterility

with chronic infection known to exist; nevertheless, the Friedman test was positive in each case on two different examinations. It was impossible to locate the pregnancy in the uterus or fallopian tube since there remained some tenderness and fixation in one side. Rest in bed and the judicious use of sedatives in both cases resulted in the abatement of the pain and bleeding and in the development of definite signs of uterine pregnancy.

A degenerating fibroid tumor may at operation feel so soft that it resembles a pregnancy and not infrequently the abdomen is closed without further ado. The surgeon may be greatly perturbed in such cases, when he later discovers his mistake. Experience has shown that if at the time of operation pregnancy is suspected, the fact can be definitely determined by injecting 0.3 c.c. of pituitrin directly into the uterus. The pregnant uterus will contract violently for a few minutes; the degenerating fibroid tumor will not.

The Risk in Pelvic Surgery

The risk in pelvic surgery when patients are in good condition is said to be lower than for upper abdominal operations. There are certain conditions, however, which profoundly increase the risk and it is imperative that one be thoroughly familiar with them.

The patient who has marked secondary anemia from prolonged uterine bleeding from any cause is an increased risk. We at the clinic have come to regard a value for hemoglobin of 40 per cent as compatible with surgery without the necessity for transfusion, and such patients may have an uneventful convalescence. In the average case of this type, however, the convalescence will be shorter and the wounds will heal more quickly if one or perhaps two transfusions are given on the second and fifth days following operation. An observation of profound importance in this connection is that the incidence of thrombophlebitis among these patients with anemia who have not received transfusions is considerably higher than normal. Nygaard, who has made extensive studies regarding thrombosis and embolism, has shown clearly that the administration of saline or glucose solutions, or both, increases the coagulability of the blood and therefore predisposes to thrombosis and thrombophlebitis. These solutions,

in surgical cases in which secondary anemia is present, especially following operation, must be used cautiously. The disability that follows thrombophlebitis is so great that every precaution must be taken to avoid its occurrence.

If in addition to having secondary anemia the patient has also lost weight, the risk is further increased. This condition is often encountered in association with uterine bleeding and pelvic infection, and uterine bleeding with carcinoma of several months' duration. Surgical removal of the diseased parts in such cases is usually difficult and the operation is followed by varying degrees of shock, which are best combated by a transfusion. The degree of surgical shock is proportional to the amount of trauma and the duration of the operation. There are no more difficult surgical procedures than those required in the treatment of pelvic inflammatory disease when fecal fistulas exist as a legacy of previous surgical interference. The difficulty is still greater if the pelvic infection is complicated by uterine fibroid tumors and endometriosis, or both. In the surgical treatment of carcinoma of the fundus of several months' duration, even though the malignancy is confined to the fundus, all the tissues of the pelvic organs are friable and great care and judgment must be exercised to avoid difficulties which might prolong the operation beyond the point of tolerance of the already handicapped patient. It is much better surgery to avoid difficulties than it is to get out of them once they have developed.

Another point for consideration in the question of the degree of risk in pelvic surgery, as perhaps in all branches of surgery, is that the risk is not sufficiently discussed with members of the patient's family. If one has evaluated the physiologic tolerance of a patient who is to undergo a specific operation and has determined the risk to be high, the risk must not be minimized in talking with members of the patient's family. It is more prudent to have them request you to proceed with the operation after a frank discussion of the risk involved than to leave them in ignorance as to the real seriousness of the condition.

Conservative Procedures

A few years ago I stated that conservatism in gynecology not only implies conservation of the sexual organs but preservation

of their function as well. Since destruction of these functions does not endanger the patient's life, function is sometimes carelessly destroyed, not because it is necessary to destroy it to effect a cure, but because it sometimes seems to be the easiest way to perform the operation. Such a procedure is illogical and should be condemned.

Many factors may influence the management of gynecologic conditions, such as the age and social and economic status of the patient. For example, a conservative operation that involves the chance of secondary operation may be entirely justified in the case of a well-to-do woman who has recently been married, but it would not be justified for a woman approaching the menopause, one who is the mother of a family, or one whose livelihood depends on her own efforts. The type of lesion may also modify the degree of conservatism in a given case. For example, partial ovarian resection of extensive, bilateral, hemorrhagic ovarian cysts may be done for a young woman, thus preserving function, but for a woman forty-five years of age or more, the operation would not be advisable. Conservative procedures have their greatest application in cases of pelvic infection, uterine fibroid tumor, adenomyoma, ovarian cysts, and endometriosis.

The value of conservatism in treating pelvic infections is well known, but it must be constantly stressed since there remains the tendency to interfere surgically before the protective forces of the patient have had sufficient time to render the inflammation inactive. Interference during the active stage of pelvic infection is not only dangerous, but almost certain to entail more extensive surgical procedures than would otherwise be necessary. Statistics indicate that 10 per cent of patients who have had gonorrheal salpingitis and who are treated conservatively subsequently become pregnant. Pelvic infections of long duration, however, particularly if complicated by fecal fistulas resulting from prior operations, fistulas communicating with the sigmoid or bladder from a tubo-ovarian abscess, or pelvic infections complicated by fibroid tumors and ovarian cysts, are definitely surgical conditions.

There is perhaps no better field for emphasizing conservative measures than when dealing with myoma of the uterus in which patients are less than forty years of age.

Myomectomy should be given greater consideration by those general surgeons who are not gynecologists or obstetricians. The destruction, by hysterectomy, of the menstrual and reproductive functions of such young women is inexcusable unless the uterus has practically been destroyed. Even in such an extreme case it is nearly always possible to save some endometrium and one ovary so that the menstrual, if not the reproductive, function may continue. Myomectomy for a degenerating fibroid tumor may be mandatory during pregnancy. If care and gentleness are exercised there is little chance of miscarriage. Myomectomy is more difficult than hysterectomy since the technic of the former is necessarily varied to suit the situation encountered. One point in its surgical technic which is frequently overlooked and which can be used to great advantage in myomectomy is that bleeding is reduced considerably if an assistant will maintain traction on the fundus during operation.

The discovery of one or two small fibroid tumors during the course of examination is not an indication for their immediate surgical removal; such tumors may remain symptomless for years, the patients even being pregnant several times without any harm being done. Many patients with small symptomless fibroids are treated with radium when the indications for such treatment are not sufficient. In the treatment of myomas, however, radium has a great field of usefulness and for small tumors which appear during the menopause and which produce hemorrhage, radium is perhaps the treatment of choice. Radium can also be employed in the treatment of symptom-producing tumors in cases of obesity, and also in the treatment of patients with associated, severe cardiac conditions, although its use in such cases has certain definite limitations. In the treatment of the healthy young woman with myoma, radium is a very destructive method of treatment and one that certainly could not be considered as conservative.

Excision of adenomyomas and endometriomas is more difficult than myomectomy, the former being surrounded by smooth muscle cells. I have previously reported the case of a young girl in which I excised thirteen adenomyomas, with preservation of the uterus and relief of her severe dysmenor-

rhea. Unfortunately, endometriomas and adenomyomas affect women between the ages of twenty-five and thirty-five years, and it is at just this period that conservatism is definitely indicated. For young women, or for older women, when it is desirable to preserve the menstrual function, the treatment of endometrioma is always surgical unless the rectovaginal septum is involved by an adenomyoma.

Ovarian cysts offer an excellent field for conservative methods of treatment, although a thorough knowledge of the pathology of these cysts is essential. It is rare to encounter malignant ovarian cysts in women less than thirty years of age. Many of the cysts of young women that we are so inclined to remove surgically will rupture spontaneously and leave the ovary intact. Some are associated with intra-abdominal hemorrhage, but rarely are they of a serious nature. If these cysts, after repeated examination, are seen to persist, it is possible to enucleate them and to preserve the ovary. If a dermoid cyst is encountered, complete removal of the ovary is usually necessary since such cysts are usually infected and 2 to 3 per cent of them contain epitheliomas. If they are malignant and have broken through the cortex of the ovary the mortality is 100 per cent. Unfortunately, a large percentage of dermoid cysts are bilateral and when patients are young, conservative measures are highly desirable. Conservative treatment in such cases consists in sacrificing the ovary which is the more affected and preserving a strip of ovary on the opposite side. The same is true of large hemorrhagic ovarian cysts, which frequently fill the pelvis and are attached to the intestines. Complete excision is often possible, with preservation of a small segment of ovarian tissue.

Abdominal Hysterectomy

The question of whether total or subtotal hysterectomy should be performed when hysterectomy is indicated is not settled and this issue is frequently discussed at medical meetings. Nor is there any unanimity of opinion among general surgeons and gynecologists, some having discarded the one in favor of the other. In the past fifteen years many have advocated total hysterectomy for fibromyomas when removal of the uterus was indicated. The training and experience of gynecologists

with the procedure are, of course, greater than that of most general surgeons, so that it is hardly fair to expect the surgeon, who is only occasionally called on to perform hysterectomy, to adopt a technic with which he has had little opportunity for experience. Although there is a definite field for both procedures, I feel that total hysterectomy should be performed in most instances in which removal of the uterus is indicated, in which the cervix is definitely diseased, and when the patient is in good general condition. On the other hand, if the cervix is small and there is no evidence of cystic disease or infection, the supravaginal or subtotal operation can be performed.

That the cervix is a source of infection and should be removed in all instances in which it is chronically diseased, and in which hysterectomy also is indicated, has been shown by Rosenow, Moench, Benedict and Nickel. Rosenow regards the uterine cervix in the same light as the tonsils, as a focus of infection. Moench has found that the organism most frequently isolated from the cervix in cases of leukorrhea is the streptococcus; in this connection Benedict and his associates have shown the relationship between chronic cervical infection and lesions of the eye. Nickel produced hemorrhagic lesions around the trigone in the bladders of dogs which had received injections of a culture from the cervical stump of a patient suffering from Hunner's ulcer. A very cogent reason for performing total hysterectomy, whenever possible, is the fact that carcinoma is all too commonly seen in the cervical stump after the subtotal operation. While carcinoma is said to occur in the cervical stump only in about 1 per cent of cases, we now have records at the clinic of 130 cases in which it occurred more than two years after the subtotal operation.

The mortality for total abdominal hysterectomy should not be greater than that for subtotal abdominal hysterectomy if the cervix has been properly prepared. The vagina and cervix should be cleansed with soap, water and alcohol and then painted with a 3 to 5 per cent solution of iodine. If the cervix is soft and has a tendency to discharge a mucopurulent secretion, a small strip of iodine gauze should be placed in the cervical canal; or the cervix may be closed by three or four interrupted sutures.

The death rate for total hysterectomy for

malignant conditions of the fundus (5.88 per cent) is somewhat higher than for benign conditions. This increase is not attributable to the type of operation so much as to the fact that many of the patients are senile, anemic, and often cachectic. Death in cases in which either total or subtotal abdominal hysterectomy is performed can also be assigned to accidental causes. Pulmonary embolism is responsible for about 50 per cent of the deaths. This accident is being very materially reduced by administering thyroid extract, by the use of massage, and of passive movements of the arms and legs and by employing tight abdominal binders after operation, as advised by Walters and Coffey.

Coning out the gland-bearing area of the cervix or its destruction by the electric cautery following subtotal abdominal hysterectomy has been offered as a substitute for total abdominal hysterectomy, in the presence of a diseased cervix other than from cancer and when hysterectomy is indicated as a safer procedure for those who have had less experience with the latter operation. This procedure, however, will not safeguard the patient against future infection or against carcinoma in the cervix because it is practically impossible to destroy all the glandular area in this manner.

The cervix and cervical canal should be inspected under direct vision preliminary to either total or subtotal abdominal hysterectomy. Extensive infection often exists along the cervical canal near the internal os in an otherwise healthy looking cervix. Early malignant growths may occur in the fundus and extend through the internal os, and they may be overlooked during subtotal hysterectomy. Carcinoma is associated in 5 per cent of fibromyomas.

Prolapse of the vaginal vault, which is seen occasionally following either operation, should not occur if the broad and round ligaments are accurately measured and sutured to the vaginal vault or the cervical stump. The approximation of these ligaments should be such that sufficient allowance is made for contraction of the scar, so that sufficient mobility will follow without prolapse.

Subtotal abdominal hysterectomy should be performed for benign conditions when it is necessary to remove the greater part of the body of the uterus and when the cervix

is in good general condition. Total abdominal hysterectomy is the best operation when any lesion other than carcinoma exists in the cervix, and when the operation is not otherwise contraindicated, or when the history suggests the possibility of malignant change in a fibromyoma or an associated malignant condition in the fundus of the uterus.

Vaginal Hysterectomy

Although extirpation of the uterus through the vagina is an old procedure, unfortunately the indications and technic are not well understood by general surgeons and even by some gynecologists. If for no other reason, the low surgical risk attending it is sufficient to recommend vaginal hysterectomy in cases of benign or malignant conditions of the fundus when the size of the tumor does not contraindicate it. C. H. Mayo recommended this procedure and in 1915 described the technic of vaginal hysterectomy for prolapse and cystocele. Statistics show that it gives satisfactory results in 98 per cent of cases. It is essential, however, before proceeding with vaginal hysterectomy for prolapse and cystocele to have a clear conception of the mechanism of the production of this abnormality. To correct it by vaginal hysterectomy requires a fundamental knowledge of the pelvic fascia, muscular floor, and uterine ligaments in addition to familiarity with the operative technic.

Indications for vaginal hysterectomy.—Although vaginal hysterectomy is the operation of choice at The Mayo Clinic for severe uterine prolapse and cystocele, there are other clinics both in this country and abroad in which it is never employed for correction of these conditions. The indication for its use, therefore, cannot universally be accepted by all gynecologists, vaginal hysterectomy frequently being performed for conditions other than prolapse.

There are a few sturdy women with uterine prolapse, varying in degree to complete procidentia, who suffer very little inconvenience and therefore would not consider surgical repair. The longest duration of complete prolapse without noticeable symptoms within my experience was twenty-five years. When once begun, however, the symptoms are progressive. Bleeding, spotting, or ulceration of the cervix immediately

creates anxiety and fear of cancer; not infrequently these may be the only symptoms. As a rule vesical symptoms predominate, and they are the earliest symptoms, since residual urine varying from a few cubic centimeters to several ounces is usually present. Chronic cystitis then supervenes and is associated with frequency, burning, incontinence, and a bearing-down sensation. With this combination of events, straining and frequent urination become more forceful, consequently increasing the prolapse and cystocele.

For debilitated individuals of advanced years, many of whom have complicating cardiovascular conditions, vaginal hysterectomy for prolapse is indicated since it can be performed by the experienced gynecologist with an extremely low risk. In parous

women the uterus is quite accessible and the operation is practically extraperitoneal. The wisdom of removing the uterus in these cases appears to me to be sound and to be preferable to vaginal plastic repair. The uterus usually has undergone considerable atrophy, and in those cases in which there is uterine bleeding during or after the menopause, early malignancy of the fundus must be excluded. This is not always easy even on microscopic examination of material obtained by curettage.

Since in such cases the usefulness of the uterus as a functioning organ has passed, and since after the menopause the incidence of carcinoma of the body of the uterus is high and the operative risk low, it would seem to me to follow that the functionless organ should be removed.

MENINGIOMAS OF THE POSTERIOR FOSSA

A Report of Four Cases

FREDERIC SCHREIBER, M.D.†
DETROIT, MICHIGAN

Meningiomas of the posterior fossa, although relatively rare, have in my experience been among the most difficult to diagnose because of their bizarre symptomatology. Owing to their slow growth, the cerebellar lobes apparently adapt themselves to the encroachment of these tumors and the ataxia, which is so prominently identified with the invasive gliomas of the cerebellum, is much less in evidence, if at all, in the more circumscribed meningiomas.

I am reporting four cases of meningioma of the posterior fossa. It will be seen that each case presents a problem in itself and does not readily fit into a definite diagnostic pattern. The first case, I believe, is unique in that it is the only one I have been able to find either in the literature or on inquiry among my neurosurgical colleagues where a meningioma and multiple abscesses occurring in the same patient were successfully operated upon.

Report of Cases

Case 1.—Meningioma associated with multiple brain abscesses. Removal of tumor. Drainage of abscesses. Recovery for three years.

J. K., male, aged fifty-six, foundry worker, was admitted to Harper Hospital, unconscious, on November 19, 1932. Eight weeks prior to admission the patient noticed a small furuncle beneath the outer canthus of the right eye, which healed in a few days. Two weeks later he began to have severe

occipital headaches which later became generalized. Four weeks before admission to the hospital he would occasionally stagger and there was a tendency to fall to the left. About this time the patient noticed a small nodule in the left occipital region which was tender and resembled a boil. The soreness spread and the whole left side of the face became swollen. The man had, with difficulty, continued his work during this time. He vomited for two days, complained of stiffness of the neck, then suddenly lost consciousness. He was taken to a hospital for contagious diseases, a diagnosis of encephalitis having been made, and nasal feedings were given for ten days. A neurologist suspected a brain abscess at this time and the patient was transferred to the neurosurgical service at Harper Hospital for treatment.

Examination revealed a markedly emaciated white male, completely unconscious, with Cheyne-Stokes respiration. In the left occipital region a firm, smooth swelling, about 3.5 by 3.5 cm., was palpable. There was no bruit or pulsation. The pupils were small, equal and reacted sluggishly to light. Fundoscopic examination showed a bilateral choked disc of three to four diopters. There were a few small hemorrhages and evidence of a moderate arteriosclerosis. The neck was extremely rigid. There was a slight left facial weakness and a slight spasticity

†Dr. Frederic Schreiber is a graduate of Harvard University Medical School, M.D., 1923. He was interne at Harper Hospital, 1923-1925; assistant to Dr. Max Ballin, 1925-1928; assistant to Dr. Harvey Cushing, 1928-1929. He is Attending Neurological Surgeon, Harper Hospital, Children's Hospital of Michigan, Receiving Hospital, and others. He is Professor of Neurological Surgery, Wayne University College of Medicine.

of all extremities, more marked on the right. A bilateral Babinski sign was present.

Roentgenograms made of the skull demonstrated a somewhat irregularly shaped defect involving the left occipital bone toward its lateral aspect, the



Fig. 1. Case 1. Oblique roentgenogram showing left occipital meningioma.

defect measuring 3.5 by 1.5 cm. (Fig. 1).

Laboratory Findings.—Red blood cells, 4,550,000; white blood cells, 12,700; polymorphonuclears, 79 per cent; lymphocytes, 21 per cent. Spinal fluid examination, done previous to admission, showed a faint trace of globulin; 160 lymphocytes; sugar, 83 mg. Blood examination showed sugar, 114 mg.; nonprotein nitrogen, 46 mg.; the Kahn reaction was negative.

Clinical Diagnosis.—Meningioma of the posterior fossa involving the overlying occipital bone.

Operation.—On October 20, 1932, a left-sided suboccipital osteoplastic flap was made, the palpable tumor mass being in the center of the flap, which was bounded by a line 3 cm. above the occipital protuberance, the midline of the neck and the left mastoid process. On dissecting the skin and muscle from the occipital bone, the tumor was found to consist of soft bluish-red tissue with a stream of yellow pus pouring away from the center of the mass. The suboccipital bone was rongeuired away well over the midline and the left lateral sinus. The bone was honeycombed with pus and tumor tissue. On exposing the dura a flat oyster-like tumor about 5 by 8 cm. was found to overlie the torcular Herophili and the left lateral sinus. The lateral sinus was ligated on both sides of the tumor, which was then slowly reflected from over the left occipital lobe. On exposing the left occipital lobe cortex, it was found to have a yellowish appearance with flattening of the convolutions underneath the tumor site. With the intention of taking a section of this yellowish tissue, the area was incised with the endotherm loop and was found to be a thick-walled abscess cavity. The operative field was contaminated by the thick greenish pus which flowed from the cavity. The abscess was widely opened and, after aspirating the pus, was filled with 2 ounces of saline solution. The flat tumor was then stripped down over the left cerebellar lobe and sectioned across, leaving some tumor tissue toward the region of the foramen magnum. (Although the tumor was easily removable, the flap would have had to be carried farther downward to remove the lower

fragment entirely.) The left cerebellum again presented the yellowish appearance previously found over the left occipital lobe. On incising the cerebellar cortex another abscess was discovered and emptied of about 2 ounces of pus. Although both



Fig. 2. Case 1. Photomicrograph of section from meningioma overlying two chronic abscesses.

abscesses were thick-walled and contained green pus, no communication could be found between the two. A small drain was placed in both the cerebellar and the occipital abscess cavities and the skin flap closed with silk.

Sections made from the tumor tissue were reported by Dr. P. F. Morse to be meningioma, while the pus from the abscesses gave a pure culture of *Staphylococcus aureus* (Fig. 2).

Postoperative Course: The patient regained consciousness during the operation and his convalescence was uneventful except for the development of about twenty furuncles about the buttocks and thighs. These healed in three weeks and the patient was discharged from the hospital on November 14, 1932. Examination made of the visual fields at this time showed a complete right homonymous hemianopsia. There was a bilateral choking of two diopeters. Practically no ataxia could be detected. The occipital wound where the drain had been inserted continued to drain a small amount of pus. The only complaints this patient had shortly before his death in 1935 were the hemianopsia and the fact that he had to wear a bandage over the occipital region because of the slight discharge. In July, 1935, an unsuccessful attempt was made to excise the sinus tract. A drain was placed in a subcutaneous cavity containing pus, but no attempt was made to uncover the original abscess sites.

This man worked as a gardener during the early summer of 1935. He became somewhat irritable at home. One night he had a spell of unconsciousness, but when seen the next day he was quite alert and had no complaints. The following day he again became unconscious and was brought to Harper Hospital, where he died on admission August 7, 1935.

Comment.—In this case the fact that the spinal fluid contained 160 lymphocytes at first led to the erroneous diagnosis of encephalitis and not until a choked disc was

discovered was an intracranial abscess or tumor suspected. I have seen a number of cases of tumor, and especially chronic subdural hematoma, with prolonged unconsciousness where a diagnosis of encephalitis was made and the patient would be sustained, sometimes for weeks, by nasal feedings. An early diagnosis is important, since in my experience these patients frequently succumb to a pneumonia even though the tumor or hematoma may present no difficult technical problem when finally diagnosed and operated on.

Case 2.—Meningioma of the posterior fossa projecting into the foramen magnum. Removal of cerebellar and intraspinal tumor with improvement. Recurrence. Autopsy.

E. I., female, aged forty, housewife, referred by Dr. William H. Gordon, was admitted to Harper Hospital on October 10, 1933, complaining of numbness and weakness of the arms and legs, pain in the neck and inability to void.

In February, 1932, a small mass had been removed from beneath the fascia in the left occipital region. There had been pain and soreness in the left suboccipital region for six years and the small mass had appeared two years before excision. Microscopic diagnosis at this time was "fibrolipoma, no malignancy." In June, 1932, the patient was again admitted complaining of headache and a recurrence of the mass in the left occipital region. At this time a small, soft vascular tumor was removed and radium inserted. Microscopic diagnosis: "Hemangio-endothelioma. Will have strong tendency to local recurrence." In March, 1933, the patient was again admitted because of headache, pain and tenderness over the abdomen. Tonsils had been removed and several teeth extracted without relieving the suboccipital pain. There was almost constant right lower quadrant pain. Appendectomy was done with ligation of tubes. There was some improvement, but in August, 1933, she was again admitted complaining of sharp constant pain in the neck and in the left upper abdomen. Examination was essentially negative except for a slight weakness in the left arm. After a few days' observation the patient was discharged, the impression being that she was psychoneurotic.

The patient had been bedridden for a month before this admission in October, 1933, the main complaints being headache, suboccipital pain on motion, numbness and weakness of all extremities. Catheterization had been resorted to because of bladder retention. I saw the patient in consultation on November 15, 1933, at which time I found pain in the neck on movement of the head, hypesthesia below the level of the second cervical vertebra, ataxia and weakness of all extremities and increase of the deep reflexes at elbows and knees. Impression: Tumor of the spinal cord at the level of the foramen magnum.

Laminectomy was performed on November 17, 1933, by a midline incision from the attachment of the suboccipital muscles to the sixth cervical spine. Laminectomy of first three cervical vertebrae. On opening the dura a tongue of tissue having the appearance of a meningioma was seen protruding down through the foramen magnum and indenting the cord. The tumor was somewhat adherent to the dura, but could be dissected free. The tumor was dissected upward and was found to extend beyond the foramen. Trephine in the left occipital bone at the edge of the foramen. The bony bridge between the trephine opening and the foramen magnum was

rongeured away. The intraspinal tumor portion was removed. Closure was made in layers with silk. Microscopic diagnosis: Meningioma.

Secondary operation November 25, 1933. A classical Cushing suboccipital crossbow approach was made without difficulty, the cerebellum being exposed from mastoid to mastoid and from the lateral sinus to the foramen magnum. The dura was extremely vascular over the left cerebellar lobe and considerable difficulty was encountered in its incision, the bleeding being controlled with endothermy. A tumor 6 cm. by 2 cm. by 2 cm. invading the entire foramen and extending to the left cerebellar angle was uncovered. The tumor and adherent dura were removed from the cord and the left cerebellum without difficulty. Some tumor tissue was left extending beyond the exposure to the left cerebellopontine angle. Closure was made in layers with silk. Microscopic diagnosis: Meningioma.

Following these operations the patient rapidly recovered bladder function, sensation and movement of the extremities. There was still considerable weakness of the arms, but she was able to walk about without ataxia. She improved steadily for a period of two months, when, following a fall, she noticed that she was again gradually losing ground.

On June 27, 1934, she was again admitted because of a feeling of constriction in the chest, weakness of the extremities and stiffness of the neck. The symptoms were much the same as on the preceding admission except that now bladder control was present and fair movement remained in the left leg. A mass 3 cm. by 5 cm. could be palpated in the left suboccipital region.

Operation on June 29, 1934. The left lateral leg of the former suboccipital flap was turned down over the palpable mass. A bluish encapsulated tumor was dissected free from the lateral neck muscles. On exposing the former decompression, tumor tissue was found spreading over the whole lateral half of the left cerebellum. Part of the tumor was soft and could be easily aspirated. Another firmer area contained a 3 ounce blood clot. By means of the endotherm and aspiration as much tumor tissue as possible was removed. However, since the patient's respirations were embarrassed and the pulse rose with every manipulation over the midline, it was thought best to discontinue the procedure. A small drain was placed in the lower angle of the wound. Microscopic diagnosis: Rapidly growing meningioma.

Following this rather unsatisfactory procedure, there was considerable return of movement in the feet, a partial return to the arms, and the feeling of "tenseness" in the neck was gone. Deep roentgen therapy was instituted in the hope of checking the rapid growth of the tumor, but there was little change in the neurological findings until her death in January, 1935.

Autopsy Findings.—On exposing the posterior fossa and the cervical canal, it was found that there had been no recurrence of the tumor at the original site over the left cerebellar lobe or on the posterior aspect of the cord. A compression ring at the level of the foramen could still be seen where the intraspinal tumor had been removed at operation more than a year previously. However, compressing the cord from the right side anteriorly at the level of the second and third cervical vertebrae was an hour-glass tumor. The intraspinal portion, about 2 cm. in diameter, was contiguous with a huge tumor mass in the right side of the neck (Fig. 3). Several hemorrhagic cysts were scattered throughout the neoplasm. The tissue diagnosis was "rapidly growing meningioma."

Comment.—In this case we were dealing with what must have been a fairly benign

tumor at its onset nine years before death. Each succeeding specimen removed apparently was more malignant in spite of removal or roentgen therapy. Although the

tive on blood, urine and spinal fluid. Blood pressure, 164/100.

The patient died thirty hours after admission.

Autopsy Findings.—When the brain was removed at autopsy (Fig. 4), a round firm mass about 3 cm.

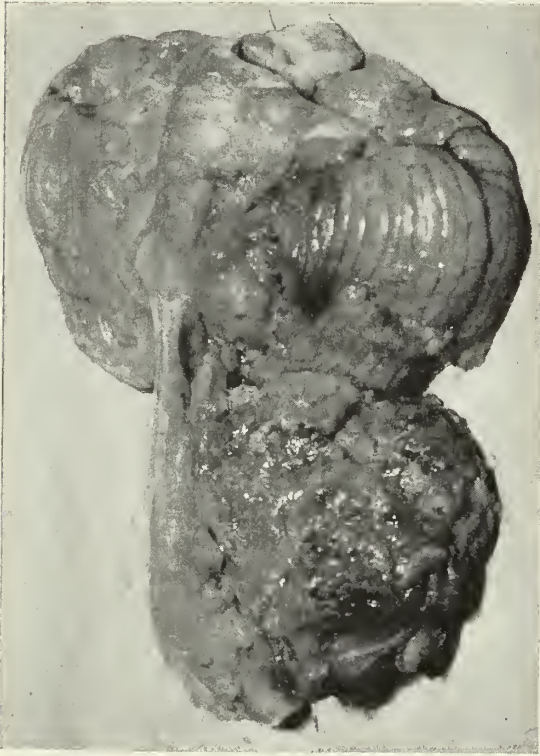


Fig. 3. Case 2. Cerebellum, cervical cord and tumor removed at autopsy. The constricted area in the cord is the site of the previous surgical removal of tumor in the foramen magnum.

tumor had reached a fairly large size in the posterior fossa, its nature did not become clear until it invaded the foramen, wedging the cord and giving unmistakable signs of a transverse myelitis.

Case 3.—Headache and vomiting of five days' duration. Coma. Death. Meningioma of the posterior fossa revealed at autopsy.

C. P., female, aged fifty-seven, housewife, was admitted to Harper Hospital in coma on March 9, 1935. Her past history was negative except for a mild hypertension and "nervous breakdown" six years previously. Six weeks before admission the patient began to have her teeth extracted, the last tooth having been extracted ten days before admission. Five days before admission to the hospital the patient complained bitterly of headache, which was associated with bouts of vomiting. Thirty-six hours before admission the patient became unconscious.

On examination in the hospital there was a typical Cheyne-Stokes breathing; knee jerks were absent and there was a questionable bilateral Babinski sign. The conclusions from the electrocardiograms were as follows: "Auricular fibrillation, right ventricular extrasystole; some diffuse myocardial damage." A spinal puncture was done, which showed clear fluid under normal pressure. Laboratory tests were nega-

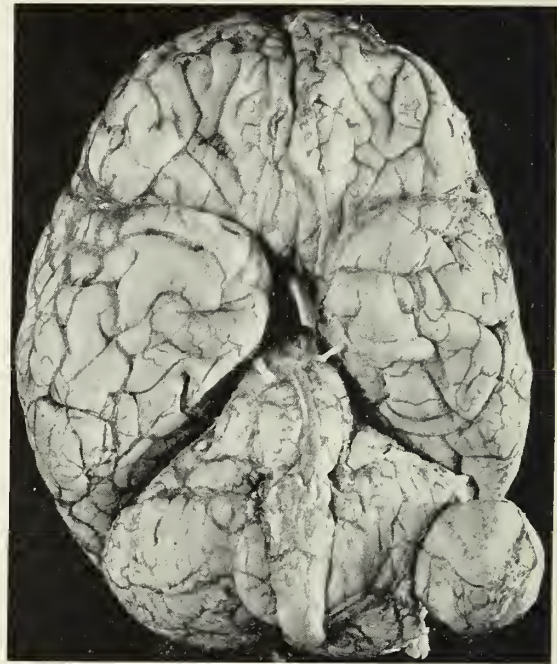


Fig. 4. Case 3. Meningioma found at autopsy.

in diameter was found adherent to the skull but inside the dura. The tumor was in the left cerebellar angle just below the tentorium. Microscopic diagnosis: Meningioma.

This case is included since the meningioma found at autopsy was almost identical in shape, position and size with that found at operation in Case 4. This patient, who was under observation for a mild hypertension, apparently exhibited no signs or symptoms of a cerebellar lesion.

Case 4.—Meningioma of the left posterior fossa. History of numerous head injuries. Sudden coma. Remission of symptoms. Removal of tumor. Recovery.

Mrs. McC., aged fifty-one, housewife, was admitted to the neurosurgical service at Harper Hospital on February 26, 1934. Ten days previously she had been admitted in coma to a hospital for contagious diseases with a diagnosis of meningitis.

Past history was not remarkable except for falls downstairs in 1916 and 1928 and a slip on the ice in November, 1933, when she struck the left side of her head. No unconsciousness.

Since 1927 the patient has had severe headaches three or four times a day, which were localized in the left frontoparietal region. These would last one to two minutes and came on every three or four days. For the past two years occasional diplopia had been noted and several times a slight staggering gait. On February 11, 1934, she became suddenly nauseated, felt weak and vomited for six hours. Two days later she became drowsy and slept the

whole day. The following day she could not be roused and because of a retracted stiff neck was sent to Herman Kiefer Hospital with a provisional diagnosis of meningitis. The positive findings noted on admission at this hospital were coma, bilateral papilledema, conjugate deviation to the left and increased deep reflexes at the right elbow and knee. Two days after admission to Herman Kiefer Hospital the patient regained consciousness.

On being admitted to Harper Hospital, which was eleven days following the attack of coma, the neurological examination was entirely negative except for slight blurring of disc margins. No ataxia could be elicited in any of the extremities with the usual tests. A diagnosis of cerebellar tumor was made from the history rather than from any neurological findings. Ventriculograms showed some symmetrical enlargement of the ventricles, although the fluid did not appear to be under pressure.

Operation was performed March 8, 1934. Under local anesthesia a Cushing crossbow incision was made with wide exposure of both cerebellar hemispheres. The dura over the right cerebellar lobe had a rather yellowish appearance, but could be easily reflected from the cerebellum. The cerebellar cortex also had a yellowish appearance with flattened convolutions as sometimes seen with the astrocytomas. A ventricular needle inserted into the cerebellar lobe struck resistance at a depth of 1 cm. The cerebellar cortex was then uncapped from over a round tumor mass 4 cm. in diameter lying just beneath the tentorium in the upper outer angle of the exposure. On separating the normal cerebellum from the firm reddish tumor, it was seen that the tumor extended into the cerebellopontine angle. By means of the endotherm loop the tumor, which had the appearance of a meningioma, was removed piecemeal with its capsule. The wound was closed in layers with silk. Microscopic diagnosis: Meningioma.

The patient made an excellent postoperative recovery. A slight right hand ataxia was present for a few days and then entirely disappeared. When last heard from, a year following removal of the tumor.

she was entirely free of headaches and had no complaints.

Unlike the more common invasive tumors of the cerebellum, the picture in this case was not a progressive one. Practically all the neurological findings which were present at the time of the coma cleared up in a period of ten days. Apparently we were dealing with a mechanical block from shifting of the tumor rather than a permanent interference with cerebellar function. However, in view of the history of headache, nausea and recurring attacks of stiffness of the neck and the findings at one time of a low grade papilledema, a diagnosis of cerebellar tumor could be made even in the absence of ataxia.

Comment.—In all four cases presented, ataxia, although present at times from the history, was not a definite finding on neurological examination. This is, I believe, a distinguishing point between the posterior fossa meningiomas and the cerebellar gliomas, with their more constant finding of ataxia.

Summary

1. A report of four cases of meningioma of the posterior fossa is given showing great variation in symptomatology and findings.
 2. An unusual case of meningioma associated with multiple brain abscess is presented.
 3. The significance of the *history* of recurrent ataxia in these cases in the absence of neurological findings is emphasized.
- 10 Peterboro Street.

CLINIC ON TUBERCULOSIS OF THE UTERUS AND ADNEXA*

R. S. SIDDALL, M.D.†
DETROIT, MICHIGAN

Although tuberculous involvement of the female pelvic organs has long been recognized, its true importance in the field of gynecology and obstetrics remains somewhat vague. Even its incidence can be a matter for debate as investigators have differed greatly in their findings. Reports could be cited giving incidences varying from less than one per cent in pelvic organs removed at operation up to 10 per cent in certain small series. The differences in the figures probably depend largely on the degree of care in pathological examination and also somewhat on the type of patients. During the last five years at this hospital, routine microscopic examination has shown tuberculous salpingitis each year in two to three per cent of the infected fallopian tubes removed at operation. Obviously, those who see many

women patients may expect to encounter tuberculosis of the pelvic structures not infrequently.

Case 1.—The first case to be presented is that of a woman thirty-six years old when first seen in 1932. Her chief complaint was sterility though she also had occasional lower abdominal pain and leukorrhea. There had been two pregnancies. The first in 1916 had resulted in the spontaneous delivery of a normal nine pound child. The second labor in 1931 was operative (probably podalic version), and the eleven pound baby died on the second day

*Presented at the Harper Hospital staff meeting of December 20, 1935.

†Dr. Siddall is a graduate of Johns Hopkins University, M.D., 1920. He is Assistant Surgeon, Department of Obstetrics and Gynecology, Harper Hospital, Detroit, also a member of the Obstetrical Staff, Herman Kiefer Hospital, and Instructor in Obstetrics, Wayne University College of Medicine. He is Extra-Mural Lecturer in Postgraduate Medicine, University of Michigan.

postpartum. Since the onset of menstruation at age of twelve, the periods had always been irregular, occurring at five to twelve week intervals, lasting four to five days, and without pain. She had never had any serious illnesses or operations.

Examination showed a rather obese woman with the abdominal wall especially thick. There was a general hypertrichosis of face, extremities, and body, but the pubic hair distribution was the normal transverse. Otherwise the general physical examination (including blood pressure, urinalysis, and hemoglobin determination) revealed nothing noteworthy. Pelvic examination showed relaxation of the vaginal outlet and marked cervicitis. The cervix was cauterized successfully, and by insufflation the tubes were later found to be patent. Small doses of thyroid gland were prescribed empirically, and the patient was advised to return for further investigation if sterility persisted.

She was next seen on July 14, 1934 (about two years after the first examination), because of rather profuse vaginal bleeding which had been present for nine days. The previous periods had been of usual duration. She also complained of some lower abdominal pain, for which there was no explanation except possibly constipation. The hemoglobin was 70 per cent. A trial of rest in bed and large doses of the anterior pituitary-like hormone were without effect, the bleeding actually increasing. On July 18 a diagnostic curettage was done, and the pathologic examination showed tuberculosis of the endometrium.

The curettage having no effect on the bleeding, the patient was again admitted to the hospital. There was now a slight fever with moderate leukocytosis, and the pain was localized to the left lower abdominal quadrant. Roentgen-ray of the chest gave negative findings for active tuberculosis. There was a further decline in the hemoglobin. The fever soon subsided, and on August 3, about four weeks after onset of the bleeding, an operation was performed consisting of total hysterectomy, bilateral salpingectomy, and left ovariectomy. Serious postoperative shock was successfully treated by blood transfusion and other supportive measures. Pathologic examination showed no evidence of tuberculosis outside the uterine cavity. There was a hemorrhagic follicle cyst of the removed ovary—a probable explanation for the lower left quadrant pain.

Since operation this patient has been seen frequently and has shown no demonstrable tuberculosis elsewhere in the body. In January, 1936, acute appendicitis and appendectomy gave an opportunity for inspection of the pelvic cavity. The right ovary had become cystic and was removed but was not tuberculous. X-ray of the chest was again negative.

This case demonstrates tuberculosis of the uterus with the common manifestations of sterility, bleeding, and the more variable symptom of pain. We question the apparent limitation of the disease to the uterus since accepted opinion holds that tuberculosis above the internal cervical os is always associated with a focus or involvement elsewhere. This is a clear indication for prolonged observation and after-care. In deciding on operative treatment, the patient's desire for another child was no contraindication, as pregnancy in any type of uterine tuberculosis has been reported only a few times. Continuation of the bleeding developed a

situation too urgent for even a trial of more conservative measures. Indeed, conservative treatment usually fails to prevent extension, and dissemination of the disease, while radical operative removal is fairly effective against these dangers.

Case 2.—The patient was a married nulligravida, thirty-four years old, who complained of leukorrhea and lower abdominal pain which had been present several years but had recently become severe. Menstrual periods were undisturbed. A year previously she had had incision of the vaginal outlet for dyspareunia.

Pelvic findings were uncertain due to pain and a thick abdominal wall, and on December 20, 1928, an examination was done under anesthesia. The uterus was forward and normal in size. The right adnexa could not be definitely outlined, but on the left there was a large, rather firm, somewhat irregular mass involving the tube and ovary. The cervix was cauterized. A week later laparotomy showed the left tube and ovary involved in an inflammatory mass which was firmly attached to surrounding organs by thick, dense adhesions, some being as broad and half as thick as two fingers. Typical tubercles were seen on the surface of the tube. The right ovary appeared normal, but the tube on that side was somewhat enlarged and nodular. Bilateral salpingectomy, left ovariectomy, and supra-vaginal hysterectomy were done. Great difficulty was experienced in freeing the left tubo-ovarian mass, the larger and densely attached adhesions being ligated and cut rather than separated from the bowel because of the evident danger of perforation.

The postoperative course was essentially uneventful, the temperature never going above 100° F. At operation the indication for total removal of the uterus was recognized, but due to the already complicated situation subtotal hysterectomy was chosen as the easier procedure. A year later the stump of the cervix was removed up to the peritoneum by the vaginal route. No evidence of tuberculosis was found. The patient has since been under observation by her family physician and also has been seen several times for treatment of recurring trichomonas vaginitis. She has never shown tuberculosis elsewhere. It is interesting and rather typical that neither of these patients had infection of the urinary tract at any time.

In discussing the treatment in this case it is to be noted that here, as is so often true in tuberculosis of the pelvic organs, the real condition was not known beforehand. However, pelvic inflammatory disease of some kind was evident, and operation for this was indicated because of severe pain. With the nature of the inflammatory process recognized, radical removal of all infected organs became necessary both for the relief of the patient's symptoms and as prophylaxis against the usual progression and possible dissemination of the tuberculosis. Preservation of the right ovary might be criticized, though its apparent freedom from disease and the known resistance of the ovary to tuberculosis was thought to be sufficient reason. Conservative surgery in regard to

the tubes and uterus is, however, rarely justified as both tubes are diseased in over 90 per cent and the uterus in at least 50 per cent of the cases.

Both of these cases illustrate the usual uncertainty in the diagnosis of pelvic tuberculosis. In the first instance the condition was unsuspected until diagnostic curettage was done, though perhaps the sterility should have been suggestive. At least one authority goes so far as to recommend curettage in all cases of sterility in order to rule out tuberculosis. In the second case diagnosis was made only after the pelvic organs could be inspected, and this seems to be in accord with common experience. Jameson states in his recent book that unless there is a definite suggestion such as general tubercular peritonitis or the patient a virgin, the differentiation of tuberculous salpingitis from other types of pelvic inflammatory disease is pure guesswork. There is nothing characteristic in either the temperature curve or the blood count. Little reliance can be placed on the presence or absence of clinical tuberculosis elsewhere as less than one-half of the proved cases show such findings. And, on the contrary, gonorrheal salpingitis may well be associated with an active pulmonary condition. The reported occurrence of a focal reaction in tuberculous pelvic organs following injections of tuberculin has proved to be variable and unreliable as a test. It may be mentioned here that the ordinarily simple procedure of diagnostic cul-de-sac puncture is usually inadvisable because of the grave risks of secondary infection and permanent fistula. Exploratory laparotomy is preferable. Unfortunately, the gross findings even at operation are not always distinctive, and the final diagnosis in doubtful cases may depend on microscopic examination or animal inoculation. In this connection, it should be added that in our experience not only pelvic inflammations from other organisms but also endometriosis with dense adhesions may be a cause of doubt both before and after the abdomen is opened.

A further word about treatment. In contradistinction to pelvic infections of other

kinds, the present tendency is toward surgical treatment in tuberculosis—radical surgery. Experience seems to have shown conclusively that rest in bed and other conservative measures are ineffectual as a rule. Roentgen-ray (not radium) therapy has some advocates, and apparently it does sometimes have sufficient ameliorating effect as to justify its use where operation would be too dangerous or has been tried and failed. Recently, the question of the best procedure for pelvic tuberculosis in patients who are under treatment for pulmonary involvement has aroused interest though as yet it cannot be answered categorically. In general, however, the best opinion favors the radical removal, if feasible, of infected pelvic organs when they are definitely retarding recovery—especially if non-operative treatment has failed. The initial surgical risk is apparently not much greater than that for chronic gonorrheal pelvic inflammatory disease, and the final recovery rate in comparative studies seems to be definitely in favor of operation. It is perhaps unnecessary to restate the important fact that ether anesthesia is distinctly contraindicated in tuberculosis, and that one of the less irritating gases or spinal anesthetic should be used.

Summary

Pelvic tuberculosis is far from uncommon. Its differential diagnosis is usually difficult because of the absence of typical symptoms or signs. The final diagnosis frequently depends on diagnostic curettage in tuberculosis of the uterus and on laparotomy in salpingitis. Treatment is primarily surgical as a trial of conservative measures will be almost certainly unsuccessful in preventing progression and dissemination of the disease. When operation is decided on, radical removal of the pelvic organs is usually advisable since tuberculosis renders them useless for their child-bearing function and the tuberculous involvement may be unexpectedly widespread. Tuberculosis of the pelvic structures is thought to be only the local manifestation of a systemic disease and indicates a search for involvement elsewhere as well as the necessary gynecologic treatment.

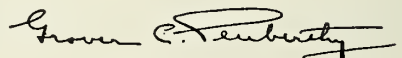
Owing to the printing of the program of the 71st Annual Meeting, also the reports of the standing committees, in this number of **THE JOURNAL**, it was found necessary to hold over until October three papers that were to have appeared in the September number.

President's Page

THIS will be of the nature of a farewell. Two years ago, I was made president-elect of the Michigan State Medical Society which gave me a year to get on to the duties of president, which position I have held during the past year. The associations I have had during this two-year period have been most pleasant, and I have been in a position to learn a number of things. Anyone who accepts the presidency of this society with its large membership, in these rapidly changing times, must expect to make personal sacrifice for the good of the state medical society. He is on call at any time and to any place in the state to give addresses, and to advise with various committees. One gives of his best and he in turn reaps experience.

I wish here to pay my sincere regards to the delegates and other officers of the Michigan State Medical Society. These other officers include seventeen councillors and members of twenty-seven committees and seven sections of the society as well as the personnel of the executive office at Lansing. I have learned that these men whom you have chosen to carry out the multifarious details demanded by our state organization are all sincere and giving of their best in the interests of the whole. It is unfortunate that every member of the society cannot be in the position to view the activities of all the elected officers, councillors, committeemen and executive staff as the president is. If it were possible, the feeling would be one of universal gratitude. They have carried out the injunction of Theodore Roosevelt printed at the head of the editorial department of this JOURNAL each month, namely, "Every man owes some of his time to the upbuilding of the profession to which he belongs."

While much has been accomplished, much yet remains to be done; but the affairs of the society are all in good hands. I take this opportunity to thank one and all for this wholehearted co-operation in the interests of Michigan medicine.



President of the Michigan
State Medical Society

THE JOURNAL

OF THE

Michigan State Medical Society

PUBLICATION COMMITTEE

A. S. BRUNK, M.D., Chairman.....Detroit
 HOWARD H. CUMMINGS, M.D.....Ann Arbor
 J. EARL MCINTYRE, M.D.....Lansing

Editor

J. H. DEMPSTER, M.A., M.D.
 5761 Stanton Avenue, Detroit, Michigan

Medical Secretary

C. T. EKELUND, M.D.
 35 W. Huron Street, Pontiac, Michigan

Business Manager

Wm. J. BURNS, LL.B.
 2642 University Avenue, St. Paul, Minnesota
 or
 2020 Olds Tower, Lansing, Michigan

SEPTEMBER, 1936

*"Every man owes some of his time to the up-
 building of the profession to which he belongs."*

—THEODORE ROOSEVELT.

EDITORIAL

MORE THAN SCIENCE REQUIRED

IN this number of the JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY appears one of the most attractive and complete programs ever offered by any state medical society. It marks the latest milestone in the progress of scientific medicine. The addresses which will be preserved in subsequent numbers of this JOURNAL are authoritative in their scope, for the time being, for there is no finality in science. Real knowledge is not proven false; it is extended and new facts are discovered. The program of the seventy-first annual meeting of the society may be considered to represent the latest experience of the profession.

We require all this and more. In the July number, we commented on resolutions adopted by the House of Delegates of the American Medical Association on the subject of requiring more of the applicant for a medical license than academic standing. There is the patient-doctor relation that is being constantly emphasized especially by the medical profession. This may be cultivated to a large degree; some never acquire what is more adequately termed the art of medicine. It was this rather than the scientific aspect of medicine (which

many of them never had) that made many of the old time physicians great. The art of medicine may be acquired by observation and by association, and here the old time preceptor relationship has proved its great value. The custom is being revived in this state by the medical school of the University of Michigan. In the future, then as in the past, the physician may come to be looked upon as an expert helper and health advisor rather than disease curer. The art of medicine emphasizes the personal feature, psychology; the science of medicine emphasizes the disease.

"It is to be hoped," writes Sir Henry Brackenbury,* "that the picture of the doctor at the bedside as a helpful and comforting angel may still be generally true; but to depict him as an almighty being exorcising a disease by some magic or mysterious procedure, or effecting a cure of and by himself without reference to the patient or his attendants, is altogether irrational and erroneous. There may be a few exceptional cases or particular morbid conditions in which events may seem to partake of the miraculous, but even in such cases it is usually quite easy to see and to appreciate that the doctor has been dealing not with a disease but with a situation. He has been a sympathetic and skilful human helper, and not a magician. Unless he is able to handle a human situation, however full of other knowledge he may be, he will never become a supremely effective medical practitioner."

WHO WANTS SOCIALIZED OR STATE MEDICINE!

THIS is the title of a brochure of twenty-six pages, published under the auspices of the Public Relations Committee of the Michigan State Medical Society. Each member of the society will receive a copy of this pamphlet in an envelope with the title in white and red letters on a black background. This piece of mail is not of the sort that should find the nearest route to the waste basket without being read. In the editorial department, page 566, appears an editorial entitled "Propaganda." It is just to such stuff as appears in lay publications from time to time that the little pamphlet will serve as an antidote. A copy has been mailed to the secretaries of other state societies, and numerous requests have been sent in for the privilege of reprinting it in other state society journals or to procure copies, numbering into the hundreds, for distribution outside of the state.

Who Wants Socialized or State Medi-

*Patient and Doctor—Sir Henry Brackenbury. Hodder and Stoughton, Publishers. London, 1935.

cine? is gotten up in a neat and attractive way and with a striking cover design. The booklet classifies the people who do not want state medicine as the public, the patient, the farmer, the employed person, the taxpayer and physician. Among those who are advocating it are (still quoting from the cover of the brochure) the profit seekers, the paid reformers, the unscrupulous politicians and the philanthropists' paid agents. With the captions mentioned, we have developed in terse, concise form, a discussion of each in relation to the general subject. The Public Relations Committee have not contented themselves by mere categorical statement of fact, as convincing in itself as this might be, but have given factual data in the way of statistics which show what has been accomplished by medical science in the matter of efficient medical care. Every reader is strongly urged to become so conversant with the facts here printed that he can render innocuous the careless statements of the propagandist.

Since each member of the society will receive a copy of this brochure, its republication in the JOURNAL in this state will not be necessary, though in other states it may appear in the pages of the state journals.

HOBBIES

THE first hobby exhibit to be staged by the Michigan State Medical Society will be presented at the annual meeting. Many hobbies are of such a nature that they cannot be exhibited, as specimens. The Wayne County Medical Society, for instance, during the past year or two has within its membership a number of physicians who have cultivated music intensively and as a result we have a symphony orchestra and also a glee club of high merit. At least one or two numbers on the program for the president's night will be supplied by the doctors' orchestra. A dramatic club of physicians has also acquitted itself with credit.

The hobby exhibit will consist of art and craftsmanship in a broad sense. There is sufficient evidence that many physicians of the state are skilled in the use of the brush as seen in two or three hobby exhibits already presented before the Wayne County Medical Society. Of course, physicians' wives and families are also included as exhibitors. Mrs. Milton Vokes has kindly con-

sented to act as chairman of the local committee. The enthusiasm will doubtless be awarded by complete coöperation on the part of doctors and their wives and families throughout the state. One is naturally modest over his nonprofessional efforts, but it should be remembered that all the exhibits are amateur. We like that word (*amare*, to love). Things done for the love of it should surpass those produced from the bread and butter motive.

"Each for the joy of the working,
And each in his separate star,
Shall paint the thing as he sees it,
For the god of things as they are."

PROPAGANDA

"WHO'S stopping health insurance?" This is the opening sentence of another propaganda article which appeared in the July *Forum*; a different paper, also by the same writer, in the *Nation* of August 1st. The article (*Forum*) is written by one who has apparently relied solely upon second hand information, which he garbles to suit his purpose. For instance, he gives Michigan as a state favoring compulsory health insurance. "As a result of this investigation (referring to the investigation of Drs. Luce and Sinai in England) the Michigan Society adopted in April of 1934 the mutual health service plan recommended by its Committee on Economics and approved by its House of Delegates." As everyone knows, this vote was rescinded and that the Michigan State Medical Society through its House of Delegates went on record as favoring further study of the matter of the economic features of medical care. The Michigan State Medical Society never was and is not now in favor of compulsory health insurance. A query to the secretary would have resulted in an answer that would set the author of these articles right.

This author also pays his respects to the American Medical Association, leaving the impression with his lay readers that the medical profession is dominated by the A. M. A. in spite of its efforts to be free. Any member of the profession who may be expelled from or denied membership in the A. M. A. is a courageous hero, progressive and according to the author, one of the independent minds in medicine. Were he to turn his attention to the legal profession,

DON'T DETOUR*

By J. M. ROBB, M.D., Detroit

he would probably feel kindly to those members who, whether through lack of qualifications, or other cause, were denied admission to the American Bar Association. The fact of the matter is, the American Medical Association is an organization democratic in principle, comprising the entire medical profession who are willing to recognize certain standards of ethical conduct and practice. It is governed by its House of Delegates chosen from the members of state medical societies all over the United States. The process of selection is eminently fair to every physician in the national organization. Dr. Fishbein would be surprised to feel (according to the writer of this propaganda article) that he is the dominating spirit or fascistic leader of the medical profession.

The policy of organized medicine in the United States is dictated by a House of Delegates which is as representative if not more so of the medical profession of this country as congress is of the population at large.

What can be more absurd than an outsider, a newspaper writer, rushing in where angels fear to tread, to call anyone reactionary who does not fall in line with his pet scheme for the socialization of medicine. To the uninformed, or only partially informed, however, such articles as appear from time to time in the lay press are likely to have their effect. Readers, as a rule, are not critical.

We do not believe that there is any desire on the part of the people at large for compulsory health insurance or socialized medicine. The writer has discussed it with lay men and women and has found that every time the subject had to be introduced by an explanation. The average layman does not know what one has in mind when he refers to state or socialized medicine. If there were any marked demand for it, this demand should surely be voiced by the people who might be more intimately affected by it, instead of by propagandists who seek to work up a demand for socialism. Every doctor should be aware of these insidious attempts to interfere with the independent practice of medicine.

Patient: "You know, this is my first illness."

Kind Visitor: "Well, let's hope it will be your last!"—*Western Producer*.

GENTLEMEN of the graduating class: Tonight you are at the gateway of a new endeavor in your lives. Tomorrow, most of the restrictions that are represented in the institutional life of the hospital, the college, and the schools through which you have gone will be loosed and you will be free, in a fairly general way, to pursue your course in life. You have been directed by the guiding hands of the executives of these institutions. Whether you realize it or not, many, by precept, example, and advice, have steered you along the great road of thought characteristic of the Doctor of Medicine. As you pass on your way there is one slogan that I would like to leave with you and that is, "Don't Detour." One of the first medical meetings of any importance which I was privileged to attend was a dinner given to the late Dr. J. H. Carstens, in his fortieth year of practice. Dr. Theodore McGraw, Sr., gave the main address. In his opening statement he said, "I have a theory, perhaps all my own, that if a man lives long enough he will get exactly what he deserves." As one goes through life this seems to be fairly generally true.

Gentlemen, you will not be long in practice before a hard problem in a patient's illness will present to you. Seeing the difficulties arise you may feel that you wish to obviate these difficulties. You may wish to escape the abuse which is inherent in the practice of medicine in difficult cases. If you need help call counsel. Never be ashamed to ask for advice, but with or without counsel, "don't detour." Face the matter squarely, analyze the situation and conquer it, and when you are through you will have made yourself a better physician and a better man.

At once, in the development of your own practice, economical and financial problems present themselves in which you will be looking for some revenue to take care of your immediate expenses. There is probably no place in the business of life where, at least temporarily, financial gain can be made by fooling the public. You must learn immediately that you cannot fabricate

*Talk given to the graduating house officers of Receiving Hospital, Detroit.

medicine as you would an automobile. Medicine is a hard mistress and continuity of effort is one of its first essentials. Do not permit the offers of rapid turnover with poor quality of medical care to entice you into the wrong course.' In other words: "Don't detour."

In a comparatively short time you will be confronted with the ethical problems in medicine and perhaps some of your business associates may feel that our traditional ethics are nonsense and that they have no place in the life of modern civilization and business. This is not true. When we are defending the lives of humankind it is necessary that ethics be kept continuously at its highest point. There is no profession, no people, so exposed to temptation as the doctor. In all these ethical and moral problems, "don't detour."

It is unfortunate that the man who goes out into practice has not the help of a preceptor, who, through the first few years, can guide him. The preceptor is pretty much a thing of the past; nevertheless, the medical society has men in it whom you can follow. Choose your ideal, realizing that at many times some selfish trends may have to be given up. More and more, it would seem that we have to become a part of the community life and we must realize that a worthy cause cannot be worthily conducted if we put our personal interest and our personal safety first.

Attend medical meetings with regularity, realizing that there are two types of physician, those who are learning and those who are forgetting, and that you are being watched not by a few but by many. Frequently, as the young man enters practice, he has a feeling that perhaps only a few of his immediate friends are watching him. He will realize afterwards that the entire community keeps some scrutiny over him. All through your entire practice, but particularly in the earlier stages, you will meet with adversity. Realize this: Adversity rightly met leaves one better than before and in the presence of this adversity keep in mind the slogan: "Don't Detour."

Hill-Billy

Visitor: "How far is it to Washington?"

Native: "Wa'al, I don't rightly know, but I'll call Eph. Eph'll know. He's travelled all over. He's got shoes."—Anon.

A MOMENT OF MEDICAL HISTORY

THE HYPODERMIC SYRINGE

By WILFRID T. DEMPSTER, Sc.D.

THE actual development of the hypodermic syringe and its almost universal acceptance in medicine occupied scarcely more than a decade. The idea, however, that the subcutaneous tissues might be an effective region for application of drugs was not so rapid a development. True, the intravenous injection of medicines had been extensively tried during the latter seventeenth century and again in the early nineteenth century. The technic, however, was hazardous from the standpoint of infection, air embolism and lack of pharmacological knowledge. Accordingly, it did not become a reliable method until recent times—many years after the hypodermic method had become standard.

From early times, the oral administration of drugs had been supplemented by the external application of medicines either as amulets or as poultices, salves and cataplasms whose virtues were supposed to be absorbed. It was not till the latter eighteenth and early nineteenth centuries, however, that serious attention was given to the physiological aspects of skin absorption. By this time, the importance of the lymphatic system as an absorptive mechanism had been recognized. The absorptive properties of the skin, however, were uncertain.

Brera, in 1800, proposed the use of vigorous rubbing of the skin as an aid to the penetration of animal fluids and other substances through the body surface. Michael Ward of Manchester, in 1809, rubbed opium into the skin and decided that opium by this method was more valuable than when given by mouth. Chrestien used mixtures of therapeutic substances with saliva, pancreatic juice or bile for rubbing into the skin or mucous membranes. Wardrop rubbed drugs into the tongue and gums for therapeutic action; Cirillo used the foot sole and Forget the axilla for this purpose. For a time, the electrical current was used to promote the penetration of a drug, usually iodine, through the skin surface. This was tried by Hassenstein in 1833 and by Klencke in 1845.

During the early nineteenth century, many studies were made on the penetration of gases, liquids and solids through the skin. A number of these had particular reference to balneology, different mineral baths being investigated to determine their specific effects. On the other hand, carbon dioxide, iodine, mercury, liniments, salves, oils, alcohols and poisons were investigated. It was found that the epidermis was resistant to absorption and what penetration there was occurred through follicles and sweat glands. Experiments on the absorption of drugs or poisons showed that most rapid effects were obtained with intravenous injection. Next, in absorptive value were open wound surfaces, serous membranes and mucous membranes. The skin was most resistant.

That the subcutaneous tissues were regions of ready absorption had been shown in the latter eighteenth century by Fontana's studies on snake venom. Similarly, Benjamin Brodie, in 1811, demonstrated the rapid effects of such poisons as woorara (*curare*), tobacco, aconite and oil of bitter almonds when applied to wound surfaces of rabbits and guinea pigs. He made a wound with the blade of a scalpel and smeared a watery paste of the poison on the raw surface. Poisons thus applied killed animals quickly and produced distinctive post mortem characteristics.

A practical therapeutic method of introducing drugs below the epidermis was devised by Lambert and Lesseur in 1823. Blisters were produced on the skin and the raised epidermis was removed. To the denuded surfaces, morphine was applied. The treatment was of most value in neuralgia, and various technics for raising blisters appeared. These included the use of ammonia or caustics and the application of hot metal. A small metal hammer had been devised for application in the blistering technic. Such methods had the disadvantage of being painful and of leaving permanent scars, but, even so, the technic was widely used. Valleix, in 1841, applied blisters immediately over the painful points in neuralgia and emphasized the value of local application of morphine.

Another technic resembled the inoculation of vaccine by Jenner's method. It was suggested, in 1836, by Lafargue of St. Emilion. In this, the tip of a lancet was moistened and rubbed into morphine or other substance to be inoculated. Then the lancet was

plunged almost horizontally below the epidermal surface carrying some of the drug into the skin. Both local and general effects were claimed for the inoculation of morphine by this method. Other drugs, such as belladonna, strychnine, quinine and digitalis, were introduced by inoculation. As a modification of the original Lafargue technic, tiny pellets of drug were inserted into punctures made into the skin with a lancet or with a trocar and canula. A Dr. Washington of New York, in 1837, scarified the skin over the lumbar region in patients in painful labor and rubbed morphine into the wound for its soothing effect. Two years later, Washington and Taylor are said to have inserted the nozzle of a small Anel syringe into a lancet puncture through the skin to inject fluid drugs. The Anel syringe was a small instrument designed particularly for irrigation of the nasolacrimal ducts. The inoculation of drugs by the Lafargue method or its modifications, though used for a time, was not as important as the endermic or blistering method.

A Dublin physician named Rynd was probably the first to use a true hypodermic method. In 1845, he reported his experiences in the subcutaneous injection of morphine in cases of neuralgia. The fluid injected was a solution of morphine acetate dissolved in creosote. Some years later, Rynd described his injection instrument. It consisted of a fine canula having a small dilated reservoir at one extremity, this end screwing into a handle. A sharpened needle or trocar projected through the canula. In practice, the trocar and canula were pushed through the skin into the subcutaneous tissues, then by a spring mechanism the needle was suddenly withdrawn from the canula into the handle of the instrument. Fluid in the reservoir could then flow by gravity into the subcutaneous tissues. Rynd's instrument, though apparently successful in the subcutaneous treatment of neuralgia, did not receive attention outside of Dublin, and it was a decade later before the hypodermic method came into extensive use through the publications of Alexander Wood.

Progress in the hypodermic method, however, awaited developments in another field. For the treatment of aneurisms, it had been suggested by Monteggia that the coagulation of blood in the aneurismal sac would be helpful. The suggestion, however, was forgotten until 1835 when Leroy d'Étioles at-

tempted to obliterate arteries by the injection of alcohol. Wardrop, in 1841, injected acetic acid into aneurisms using Anel's syringe. Three years later, Bouchart considered the use of sulphuric acid. In 1850, Pravaz of Lyons, who had been studying the coagulation of blood by the electric current, turned his attention to the coagulation of blood by chemicals. Animal experiments indicated that perchloride of iron was an effective coagulator. Pravaz perfected the technic of coagulating aneurisms with perchloride of iron and adapted for this purpose a small one cubic centimeter syringe of a type which had been used in physiological experiments by Claude Bernard. The instrument made of silver was five centimeters long and was provided with a fine hollow canula of the same length tapering to a one millimeter opening at the end. When the piston handle was twisted, each half turn ejected one-thirtieth of a gram of fluid. The Pravaz technic of coagulating injection along with the syringe came into extensive use in the treatment of both aneurisms and *nævi*.

In 1853, the year of Pravaz's introduction of perchloride of iron injection, Alexander Wood used a Ferguson syringe for injecting a *nævus*. Being interested in neuralgia and having used the blistering method of applying morphine, it occurred to him that the tiny syringe would be superior to blistering in the treatment of neuralgia. Wood, following the principles of Valleix for local application of morphine, attempted to inject the solution as close to the afflicted nerve as possible. He used Battley's solution of morphine. Within a year of Wood's publication in 1855, a number of Edinburgh physicians had used the syringe for a subcutaneous treatment of neuralgia.

The Ferguson syringe used by Wood was a small instrument having a glass barrel to which was attached a hollow needle with an opening near the point "like the sting of a wasp." The needle was inserted into a fold of skin over a painful spot and the point was directed toward an afflicted nerve and at an appropriate depth. The piston was shoved home and a charge of morphine was delivered near the nerve.

Following Wood's advocacy of the syringe in the treatment of neuralgia, others published on the method, notably Bell, Oliver and Charles Hunter. In 1859, the last began a series of communications on

subcutaneous injection. Following a series of animal and human experiments on the injection of morphine, Hunter used the method not only in neuralgia, but in *dilerium tremens*, mania, wakefulness and tetanus. He introduced the use of strychnine in injection and was an early advocate of strophine and quinine injection. Hunter used a syringe by Whicker and Blaise, an instrument with a glass barrel and a piston which worked with a screw handle, each half turn of the handle delivering half a minim of fluid at the needle tip. The needles or "pipes" which screwed to the barrel were of silver with hardened gold points. It was Hunter who coined the term *upodermic* or *hypodermic* for the method of injection.

In introducing the hypodermic method, Wood had pointed out that the injection of morphine produced both a local and a general effect, and it was the local effect, he believed, which was of greatest significance in the treatment of neuralgia. Hunter, on the other hand, maintained that the value of the method lay in a generalized effect of the drug. Injection at a distance from the painful region was as effective as local injection, was not as painful at application and was less likely on repeated injections to cause irritation. For two decades, users of the hypodermic syringe aligned themselves as supporters of one view or the other. In 1885, Halstead and Corning's introduction of cocaine as an effective local anesthetic superior to morphine ended the controversy.

Following Hunter's early articles, medical writers in England and other countries began to advocate hypodermic injection. In England, a committee of the Royal Medico-Chirurgical Society (1867) reported on the efficacy of the hypodermic method. The committee report was of great importance in establishing the injection technic. The effects of injection, according to the committee, were certain, intense and rapid. In some cases, the unpleasant symptoms of oral administration of drugs could be avoided by injection; in others, the drugs were more easily introduced. A further advantage was the economy of the method. The committee advocated the use of clear neutral solutions only and reported on the effects of such drugs as aconite, atropine, morphine, strychnine, quinine, calabar bean, potassium iodide, podophyllum and hydrocyanic acid. It recommended Coxeter's glass syringe, the

Whicker and Blaise syringe used by Hunter, or the more complicated Weiss instrument.

In America, Fordyce Barker was the first to use the hypodermic syringe, in 1856. It was a gift from Professor Simpson of Edinburgh and resembled the instrument used by Wood. Most American syringes were modifications of this early instrument, the earliest models being made by Tieman and Co. This firm made a number of designs of syringes using silver, glass, hard rubber or composition barrels. Needles were made of steel, or, to avoid chemical action with injection fluids, gold or gold-plated metals. The piston invariably had a leather packing which was periodically moistened with oil to insure close fitting. The hard rubber syringes were much cheaper than the glass or silver syringes, but most writers condemned them as inefficient.

Most active of the American advocates of hypodermic medication was Antoine Rupaner whose first paper was published in 1860. His manual on hypodermic injection appeared in 1865. During the Civil War period, the hypodermic method became definitely established in America. In 1869, R. Bartholow published his widely used manual outlining the technic of injection, indications for use and formulæ.

On the continent, Béhier made injections of strychnine in paralysis. He also used atropine and other drugs for injection. Other Frenchmen who used the hypodermic method during the early 1860's were Courty of Montpellier and Luton of Rheims. Von Graefe of Berlin introduced the hypodermic method in ophthalmological practice in 1863, and Semeleder used morphine injection in surgical cases. Franque, Scanzoni, Nusbaum and Eulenburg were active in the more general aspects of hypodermic therapy in Germany. In Italy, the method was advocated by Gherini, Gualo and Scarenzio.

At first, European physicians used the original instrument of Pravaz or a modification by Béhier instead of the simpler syringes used in the British Isles or in America. In the Béhier syringe, the canula which screwed into the barrel was provided with an inner canula and a trocar. In the use of such an instrument, the canulæ and trocar were removed. These were inserted through a skin fold; then, the operator removed the perforating trocar and screwed the previously loaded syringe into the canulæ. The

piston rod of the syringe was screwed, each half turn delivering a thirtieth of a gram of fluid into the subcutaneous tissues. A thumb was then placed over the point of injection and the syringe was pulled free.

Though the Pravaz technic was popular in Europe, this method of injection was painful. Air was admitted with the injection and fluid often escaped. The Charrier Co. replaced the trocar and canula with a fixed needle like that of the English instruments. Other French instrument makers further modified the syringe. Matthieu devised a combination screw and sliding plunger. Leur replaced the screw mechanism by a sliding plunger regulated by a set screw. The Leur syringe soon became very popular, particularly in Germany. Usually, the instruments consisted of a graduated glass barrel with silver mountings. Pistons had leather plugs to insure close fitting and the gold or steel needles had sharpened lancet points just anterior to the opening. In Vienna, Leiter made syringes similar to the Leur type, often with hard rubber tubes or fittings. Various companies supplemented the steel or gold needles of the early instruments with platinum-iridium needles or those of platinum coated with steel.

With the Leur type of syringe, the instrument was filled by inserting the needle into fluid and pulling the plunger. Air was expelled with the point upward. To use, the needle was inserted through the skin into the subcutaneous tissues; the plunger was forced home; then the needle was removed while a thumb was placed over the point of injection.

As the hypodermic method came into universal use in the 1860's, syringes were fitted into compact vest pocket cases which were provided with two or three small vials or flasks to contain the most usual solutions. Such solutions were mixed some time before use, filtered and carried in the vials. Because the vials frequently leaked, attempts were made to build reservoirs into the instrument case or screw fluid containers directly to the syringe. Commonly, a weighed quantity of powdered drug was put into paper packets to be dissolved before use. About 1880, drugs were prepared in small gelatine discs, but these were slowly soluble. In 1880, L. Wolff and H. A. Wilson recommended the use of soluble compressed pellets or tablets in which the drug was mixed with sodium sulphate or sodium

chloride as a matrix. The pellets were to be inserted into the syringe with an appropriate amount of water to produce a suitable solution for injection. These were stable, accurate as to dosage and convenient.

The hypodermic syringe was used not only by physicians but by physiologists and bacteriologists. The latter, beginning about 1870, used the syringe for inoculating experimental animals with organisms or viruses. To avoid contamination, such a technic demanded sterilizable syringes. The first aseptic syringes were those of Straus and of Roux. Gradually, the importance of sterilizable syringes was forced on all users of the instrument and manufacturers eliminated leather piston packing and other sources of contamination. The all-glass syringe and plunger, together with stainless steel needles, became a standard instrument during the last few years of the nineteenth century.

The Doctor and the County

Th' ither nicht Geordie MacIntosh wis tellin' me what a fine thing it was that a' th' poor people noo cud hae a' their operations done for naithin' an' th' Doctor paid by th' countv.

An' ah says, "Geordie, did ye ever stop tae think of ony worthy poor person who needed an operation that didna get it, whether he had monie or no?"

"Weel, noo that ye come tae speak o' it. Weelum, ah dinna think ah hae. On th' contrary ah'm mindin' o' Sandy MacTavish's lad, Tam. Tam MacTavish wha lives doon th' road here at th' corners. Weel, ah mind that stormy day aboot ten year ago when Tam got sae badly hurt i' th' woods an' auld Dr. Fraser cam oot frae Dover an' took Tam intil th' hospital in his ain wee sleigh through th' deep snow an' mony snow drifts. Weel, he kept him there for sax lang weeks, lyin' there atween life an' death. I mind it wis spring afore Tam came hame. Weel, Tam didna hae a rag tae his name then, an' noo, ah'm ashamed tae say it, bit say it ah must, Tam hasna paid th' Doctor yet. An' th' Doctor noo, great man that he was, is a' crick an crippled oop an' ah wis hearin' jist yesterday that he's nae for leavin' his bed much noo, an' he hasna much tae leave th' family—jist a heritage o' fifty years o' personal service weel done tae maist a' th' people roon aboot."

"Aye," ah says, "nae ane ever suffered for want o' a Doctor."

WEELUM.

A Scotchman who had lost his way on the Alps was found by one of the St. Bernard dogs. He helped himself to the flask of liquor, patted the dog and settling himself comfortably, said, "Noo, gang and bring the hale pack o' dogs wi ye."

Whistler, the artist, was trying to help a fellow-artist out by getting his picture displayed at the exhibition. Hot with rage, Whistler's friend came rushing to him with the story his picture was hung on the wall, but upside down. "Hush," said Whistler to him, "Let it stay that way—it was refused a place the other way."

MEDICO - LEGAL DEPARTMENT

GET COMPLETE CONSENT IN WRITING BEFORE YOU OPERATE

By *Herbert V. Barbour*, Detroit†

THE editor of your JOURNAL has asked me to prepare some article on "Malpractice" that I thought would be of interest to both the general practitioner and the surgeon. He made no mention of the subject, so I am taking the liberty of reviewing a case which I recently tried which illustrates the value of a written consent to an operation as well as other points that should be known to the medical profession.

Two doctors were charged jointly with having been guilty of malpractice, and with having been guilty of committing an assault upon the patient. The plaintiff, a girl of twenty-one years, consulted a physician and surgeon, and the surgeon, after an examination, ordered the patient to rest at home for a few days. At the end of approximately a week the surgeon was called again and he suggested that the patient be sent to a hospital for further examination and diagnosis. This the patient did and the attending surgeon called another surgeon who made an independent examination and the two surgeons agreed that the patient should be operated for appendicitis. The patient signed the following card:

PERMISSION FOR OPERATION

Permission is hereby granted to authorities of.....Hospital, Doctors..... and....., for such procedures as may be necessary in the case of.....

APPENDECTOMY

(Insert detail of procedure)

This card was signed by the plaintiff and she admitted she read the card before signing. Plaintiff was then taken to the operating room. The chart showed that her temperature was 98.4 degrees, pulse 84, character of pulse—good. After the removal of the appendix, the surgeons, after some further explorations, discovered a condition in the fallopian tubes which they considered warranted their removal, and without obtaining the consent of the patient, but after consulting also with the anesthetist, who was also a surgeon, proceeded to remove the tubes.

†Mr. Barbour is attorney for the Medical Defense Committee of the Michigan State Medical Society.

The appendix and both tubes were sent to the laboratory for microscopic examination and the report, which was not very complete, stated that the tubes showed thickened placations with intact mucosa. The outer layers showed marked congestion, edema and round cell infiltration. Some areas show small hemorrhages, early acute salpingitis. Attorneys for the plaintiff dismissed the charge of malpractice; that is, they offered no proof of unskillfulness in the performance of the operation, but based their claim purely on the assault. Our Supreme Court has held that a physician is guilty of assault if he performs an unauthorized operation.

With the question of malpractice removed, two points remain. First, did the plaintiffs perform an unauthorized operation? This depends on a construction of the consent to the operation, and the Court held that since the consent specifically mentioned only appendectomy, that the surgeons had no legal right to do more than remove the appendix unless: Secondly, an emergency existed which legally means danger to life or health, if the operation is not immediately performed.

Testimony was introduced by the defendant as to the custom, in the hospital, of surgeons operating under a similar form of consent, to exercise their best judgment in performing a different operation than intended, if in their judgment it was necessary. The Court, in charging the jury, held that the patient could not be familiar with any such custom and that it was not binding on her.

The plaintiff offered medical testimony that the removal of the fallopian tubes as shown by the microscopic examination, was not an emergency operation. The defendants, on the other hand, offered testimony by outstanding state surgeons that if the fallopian tubes were inflamed and there was evidence of pus and the tubes were greatly swollen, they considered such condition amounted to an emergency and the surgeons were justified in the removal of the tubes.

The Court held, in its charge to the jury, that the written consent to the operation did not permit removal of the fallopian tubes as a matter of law. He further charged that if the jury believed the tubes were in such condition as to endanger the life or health of the patient, then an emergency

existed and the doctors would not be liable for their removal. On this point the jury disagreed and there must be a retrial.

The lessons to be learned from this case, as I see them, are as follows: First, if you secure the written consent do not specify any particular operation but have it read something like the following: "*Permission is hereby given, or I hereby authorize and request Dr. ——— to operate on me for whatever condition he finds after an incision, and to do whatever he deems necessary in operating on me.*" Second, if you suspect operation may be necessary which would render a patient sterile, be sure to obtain the written consent of the patient or of someone who has authority to speak for the patient. If the patient is unable to do so for herself and if you do operate without written consent be sure your microscopic findings will substantiate your claim that you discovered an emergency operation was necessary after starting the operation, and that you had discovered your previous diagnosis was in error or incomplete.

The question has been asked me as to whether or not a doctor would not be subject to a suit for malpractice if he discovered a condition during the operation which he did not anticipate beforehand—and if he did not operate on such unknown condition? Also it has been stated to me, many times, that it was the usual and ordinary practice if a surgeon discovered a condition which he did not anticipate, to extend the operation to save future trouble and a second operation.

In answer to the question, it seems to me that the surgeon might well be charged with failure to do his duty if he discovered a condition dangerous to life and health of the patient, and did not extend the operation to care for this condition. Certainly it would seem to be the common-sense view but the writer is not familiar with any decision covering this exact point.

Just a Sample

It was a sultry day, and the two sailors had just been released from a hot spell of duty aboard.

Immediately they reached shore, they made a bee line for the first public house they saw, and ordered two quarts of ale.

The men emptied their tankards in one draught, while the barmaid looked on in undisguised admiration.

The man who had paid stood a second or two wetting his lips meditatively, and then turned to his comrade with a grin. "Taint so bad, Bill, is it?" he remarked. "Shall we have some?"—*The Humorist*.



THE DETROIT WATERFRONT

THE 1936 ANNUAL MEETING

DETROIT. What can be said about it that is not already known, not only to the medical profession of Michigan, but to the whole world? It is the metropolis of the state. Historically, it is the oldest settlement west of Montreal, unless Sault Ste. Marie can claim priority as a rendezvous for the voyager on his westward march. Detroit has had its historical vicissitudes. It has been under English, French and American rule. Not only historically, but commercially, has it had its cycles, its depressions from which it has emerged triumphantly as it is doing at the present time.

During the past quarter of a century, no other city in the world has experienced such a phenomenal growth. Malthus, the noted author of a work on population, would have to evolve a new theory of population were he living in Detroit today. The city's increase has been chiefly among young adults attracted here by the many advantages offered to the industrious worker.

The story of the automobile is so well known that it will scarcely bear repeating. Thousands of visitors to the city as well as delegates to conventions (for Detroit is preëminently a convention city) visit the automobile plants of the city each year. Chrysler, General Motors, Packard, Ford, Hudson, Plymouth, Dodge, DeSoto, Lincoln, Reo, Hupp, Oldsmobile, Chevrolet, Buick, LaSalle, Cadillac, Terraplane, Graham Paige, and other automobile and truck plants are grouped either in Detroit or within a radius of seventy-five miles. The Detroit area produces ninety-six per cent of all passenger automobiles built on this continent.

This huge output of automobiles necessitates the manufacture of accessories, and demands that Detroit be a shipping center almost second to none.

Not only is this city a center of the largest automobile industry in the world, but it has the largest stove manufacturing plant, the largest adding machine plant, pharmaceutical and electric refrigeration plants. There are one hundred and thirty-three companies manufacturing drugs and chemicals. A number of concerns are engaged in manufacturing airplanes. Detroit has a municipal airport as well as a county airport. It has the largest copper and brass rolling mills and is well forward in the production of salt, marine engines, paints and varnishes, freight cars, vacuum cleaners, twist drills, et cetera. We will not enlarge further on what is seemingly well known to the readers of this JOURNAL.

Detroit a Medical Center

Reference has been made to the influx of population. This influx has included hundreds of physicians. The medical profession now numbers two thousand, fifteen hundred of whom are members of the Wayne County Medical Society. Many physicians now in their prime were born and educated in Detroit. Many more have been attracted there as a pleasant place to carve out their future. The medical profession of Wayne County consists of graduates of almost every first class medical school on the continent, besides many who have had training in European medical centers. The result is a high standard in quality of medical care and

practice. The Wayne County Medical Society is the fourth largest of its kind in the United States. For the fee charged, no county society offers so much to its members. Among the benefits of the society may

cal Society headquarters are held dinners and many other get-together functions that make for a friendly coöperation among the members of the profession and their wives and families.



WAYNE COUNTY MEDICAL SOCIETY BUILDING

be mentioned the privileges of the club located in the society's home at the corner of Woodward and Canfield Avenue. These quarters were made possible through the generosity of the Whitnev family.

The Wayne County Medical Society programs offer a wonderful opportunity for post graduate study each year. They are held each week in the lecture room of the Art Institute. In addition to this, younger members of the society have inaugurated some years ago a Study Club which meets twice a week at noon at the society's headquarters. The upper age limit for members in this club is forty years. Here members present papers of excellent quality for which, at the end of the year, prizes are awarded.

Not only is the academic side of medicine well cared for, but likewise the social features, for here at the Wayne County Medi-

Detroit is in fact becoming a medical center with greater opportunities for post-graduate study. The work inaugurated a number of years ago by the department of postgraduate medicine of the University of Michigan in conjunction with the Michigan State Medical Society held its first sessions in both Detroit and Ann Arbor. The demand for post-graduate instruction has been so pronounced that these courses have been extended to other centers of the state. Detroit, however, with its wealth of material, acute as well as chronic, conditions, is bound to become a great medical center. Nothing but a lack of enthusiasm can hold it back. Since this ennui is not characteristic of the medical profession who have located in Detroit, we can be assured that nothing will retard the progress of post-graduate instruction there.

Detroit is the home of Wayne University,

an institution for the most part, young in years, but with an amazing vitality. It is now a complete university giving instruction not only in academic but in all professional lines, including law, medicine and engineer-

pitals, in particular, are well suited for teaching. Probably no other place in the world are the facilities for the care of patients afflicted with tuberculosis equal to those in Detroit. The Receiving Hospital as



DETROIT RECEIVING HOSPITAL

ing. The old Detroit College of Medicine and Surgery has become an integral part of Wayne University so that it is now known as the Medical Department of Wayne University. The medical school has had a long and honorable history. It has always met the demands of the times. Beginning as a proprietary school, it was eventually taken over by the City of Detroit, when it became part of the municipal educational set-up. The undergraduate teaching is carried on in municipal hospitals, particularly Receiving Hospital. The school has access to the Wayne County Medical Library, which is a part of the general library system of Detroit. The purely academic branches are taught by full-time professors and instructors, while knowledge of the clinical side of medicine is imparted by physicians in active practice.

And here, mention might be made of Detroit's large and splendidly equipped hospitals. The large and smaller private hospitals are well known for their excellent facilities for medical care. The municipal hos-



HERMAN KIEFER HOSPITAL
Tuberculosis Department



DAVID WHITNEY BUILDING

well as the county hospital at Eloise provide untold wealth of material as well as laboratories and other facilities for medical and surgical study.

OFFICIAL PROGRAM—THE 1936 ANNUAL MEETING

Official Call

THE Michigan State Medical Society will convene in annual session in Detroit on September 21, 22, 23, 24, 1936. The provisions of the Constitution and By-laws and the official program will govern the deliberations.

GROVER C. PENBERTHY, *President*

HENRY COOK, *Chairman Council*

FRANK E. REEDER, *Speaker*

Attest:

C. T. EKELUND, *Secretary*

CONVENTION NOTES

Register—Fourth floor, Book-Cadillac Hotel, as soon as you arrive. Admission will be by badge only to all scientific assemblies. Bring your A.M.A. or County Society Registration card to expedite registration. No registration fee to members.

Guests. Members of the A.M.A. from any state, or province of Canada, may register as guests without charge. A welcome is extended to physicians in good standing in their respective county and state societies.

Physicians not members, if listed in the Directory of the A.M.A., may register upon payment of \$5.00. This amount will be credited to them as dues in the Michigan State Medical Society for the balance of the year provided they subsequently make application to their county society and are acceptable thereto.

SECRETARIES' CONFERENCE

English Grill Book-Cadillac Hotel

5:30 P. M. Wednesday, September 23

Refreshments — Dinner — Program

Snappy and Informative Capsule Chats

Adjournment 7:50 P. M.

The Scientific Exhibits are worthy of your careful study. Fifty-two exhibits represent medical progress of real educational value. Exhibits of Radiology, Pediatrics, Surgery, Dermatology and Syphilology on fourth floor; of Ophthalmology and Otolaryngology, General Medicine, Obstetrics and Gynecology and composite exhibit of Eloise Hospital on fifth floor.

Hobby Exhibit in Parlor C, fourth floor. See how many of your fellow practitioners are artists and be amazed at their attainments.

Seventy-two Technical Exhibits deserve your attention. Progress in technical equipment, in pharmaceutical manufacture, new books, foods—all displayed for your interest.

Bus Service Wednesday and Thursday mornings leaving the Book-Cadillac Hotel at three-minute intervals. Take Fourteenth Street bus to Harper, Grace and Children's Hospitals. These busses go out John R Street.

Parking. Do not park on the streets. Use parking lot on Washington Boulevard, the Detroit Parking Garage near Book Tower, or use parking lots adjacent to Wayne County Medical Society Building, 4421 Woodward Avenue.

Telephone Service. Local and long distance telephone will be available next to registration booth. In case of emergency only doctors will be paged from general and section meetings by announcement on the screen.

Woman's Auxiliary. Registration Monday, Parlor H, fifth floor, Book-Cadillac Hotel. See page 6 for program. Hobby Exhibit in Parlor C sponsored by Woman's Auxiliary. The women have prepared a catalog of all entries; copies may be obtained at the registration desk or in Parlor C. A member of the Auxiliary will be in attendance throughout the convention.

Fraternity and Alumni Banquets. Watch the Bulletin Board for Announcements.

Michigan Branch Medical Women's National Association, Inc., is holding its sessions simultaneously. Several interesting luncheon and dinner meetings have been arranged. The program of these will be posted on the Bulletin Board.

The Public will have the exhibits open to them Tuesday afternoon from 1:00 to 5:00.

Special Event at Detroit Golf Club, Tuesday afternoon. President Penberthy and Henry Cook, Chairman of the Council, will play nine holes (more if Henry can make it) for a \$5.00 a hole side bet. Tony Reeder, Speaker for the House of Delegates, is official booker for other bets. Gruber will caddy for Cook, and Snapp for Penberthy.

Presidents' Dinner Wednesday evening at 6:00 P. M. for past-presidents, officers, councilors and guests. Founders' Suite. By invitation. Formal.

DAILY SCHEDULE

SUNDAY, SEPTEMBER 20

4:00 P. M.—Council Session.

Founders' Suite, Book-Cadillac Hotel

MONDAY, SEPTEMBER 21

9:30 A. M.—House of Delegates.

Grand Ball Room, Book-Cadillac Hotel

2:00 P. M.—House of Delegates.

Grand Ball Room, Book-Cadillac Hotel

7:30 P. M.—Reference Committee Work.



GROVER C. PENBERTHY, Detroit
President



HENRY COOK, Flint
Chairman of the Council



H. E. PERRY, Newberry
President-Elect



FRANK E. REEDER, Flint
Speaker of the House of Delegates

TUESDAY, SEPTEMBER 22

- 9:00 A. M.—House of Delegates.**
Grand Ball Room, Book-Cadillac Hotel
- 1:00 P. M.—Golf.**
Detroit Golf Club
- 3:00 P. M.—Baseball.**
Navin Field
- 6:00 P. M.—Golfers' Dinner.**
Detroit Golf Club
- 6:00 P. M.—Council Meeting.**
Parlor H, Book-Cadillac Hotel

- 8:00 P. M.—First General Session**
Grand Ball Room, Book-Cadillac Hotel
Address by CHARLES GORDON HEYD,
Vice President, American Medical
Association.
Smoker. Wayne County Medical
Society, Host.

WEDNESDAY, SEPTEMBER 23

- 9:00 A. M.—Scientific Sections**
: **Surgery**
Grace Hospital
Medicine
Harper Hospital
Traumatic Surgery
Receiving Hospital
Obstetrics and Gynecology
Harper Hospital
Pediatrics
Children's Hospital
Dermatology and Syphilology
Grace Hospital
Radiology
Grand Ball Room,
Book-Cadillac Hotel
Ophthalmology and Otolaryngology
Founders' Suite,
Book-Cadillac Hotel
- 2:00 P. M.—Second General Session**
Grand Ball Room, Book-Cadillac Hotel
- 5:30 P. M.—Secretaries' Conference**
English Grill, Book-Cadillac Hotel
- 6:00 P. M.—Past Presidents' Dinner**
Founders' Suite, Book-Cadillac Hotel
- 8:00 P. M.—Third General Session**
Grand Ball Room, Book-Cadillac Hotel
President's Night
Biddle Lecture by GEORGE CRILE,
Cleveland, Ohio

THURSDAY, SEPTEMBER 24

- 9:00 A. M.—Scientific Sections**
Surgery
Grace Hospital
Medicine
Harper Hospital
Symposium on Fractures
Receiving Hospital

- Obstetrics and Gynecology**
Harper Hospital
Pediatrics
Children's Hospital
Dermatology and Syphilology
Grace Hospital
Radiology
Grand Ball Room,
Book-Cadillac Hotel
Ophthalmology and Otolaryngology
Founders' Suite,
Book-Cadillac Hotel

- 2:00 P. M.—Fourth General Session**
Grand Ball Room, Book-Cadillac Hotel

DAILY

Scientific and Technical Exhibits

**Woman's Auxiliary to the
Michigan State Medical Society**

PROGRAM

MONDAY, SEPTEMBER 21

Registration—Parlor H, fifth floor, Book-Cadillac Hotel

TUESDAY, SEPTEMBER 22

- 8:30 A. M.—Pre-convention Board Meeting**
Breakfast—Book-Cadillac Hotel
- 10:30 A. M.—Annual Meeting**—Founders' Suite,
Book-Cadillac Hotel
- 1:00 P. M.—Annual Luncheon**—Book-Cadillac
Hotel
- 3:00 P. M.—Baseball,** Navin Field, Detroit vs.
St. Louis
- 6:30 P. M.—Dinner and Bridge**—Woman's City
Club, Detroit.

WEDNESDAY, SEPTEMBER 23

- 9:30 A. M.—Visit to Greenfield Village, Dearborn**
- 1:00 P. M.—Luncheon at Dearborn Inn**

THURSDAY, SEPTEMBER 24

- 10:30 A. M.—Post-convention Board Meeting**—
Book-Cadillac Hotel

SEPTEMBER 21-24

Hobby Exhibit

Parlor C, fourth floor, Book-Cadillac Hotel

HOUSE OF DELEGATES ORDER OF BUSINESS

Monday, 9:00 A.M., September 21, 1936

1. Call to Order by the Speaker.
2. Report of Committee on Credentials.
3. Roll Call.
4. Appointment of Reference Committees:
 - On Officers' Addresses.
 - On Council Reports.
 - On Reports of Standing Committees.
 - On Reports of Special Committees.
 - On Amendments to Constitution and By-laws.
 - On Resolutions.
5. Speaker's Address—FRANK E. REEDER, Flint.
6. President's Address—GROVER C. PENBERTHY, Detroit.
7. President-elect's Address—H. E. PERRY, Newberry.
8. Address (by invitation)—JUDGE FRANK L. McAVINCHEY, Chairman of Legislative Committee, Probate Judges' Assn. of Michigan.
9. Annual Report of Council.
10. Report of Delegates to American Medical Association.
11. Reports of Standing Committees:
 - (a) Legislative Committee.
 - (b) Representatives on Joint Committee on Public Health Education.
 - (c) Committee on Economics.
 - (d) Cancer Committee.
 - (e) Preventive Medicine Committee.

Recess

Monday, 2:00 P.M., September 21, 1936

1. Supplementary Report of Committee on Credentials.
2. Roll Call.
3. Reading and Adoption of Minutes.
4. Reports of Special Committees:
 - (a) Public Relations Committee.
 - (b) Advisory Committee on Postgraduate Education.
 - (c) Maternal Health Committee.
 - (d) Mental Hygiene Committee.
 - (e) Radio Committee.
 - (f) Advisory Committee Woman's Auxiliary.
 - (g) Liaison Committees for Hospital, Bar, Dental, Nurses' and Pharmacists' Associations.
5. Unfinished Business.
6. Resolutions and New Business.*
7. Reports of Reference Committees:
 - (a) On Officers and Council Reports.

*See By-laws, Chap. 3, Sec. 7. Par. (a).

- (b) On Reports of Standing Committees.
- (c) On Reports of Special Committees.
- (d) On Amendments to Constitution and By-laws.
- (e) On Resolutions.

Tuesday, 9:00 A.M., September 22, 1936

1. Supplementary Report of Committee on Credentials.
2. Roll Call.
3. Reading and Adoption of Minutes.
4. Supplementary Report from Council.
5. Supplementary Reports from Reference Committees.
7. Election:
 - (a) Councilors:
 - 1st District, to succeed Henry R. Carstens, Detroit.
 - 4th District, to succeed C. E. Boys, Kalamazoo.
 - 5th District, to succeed Vernor M. Moore, Grand Rapids.
 - 6th District, to succeed Henry Cook, Flint.
 - (b) Delegates to A. M. A. to succeed:
 - H. A. Luce, Detroit.
 - C. S. Gorsline, Battle Creek.
 - J. D. Brook, Grandville.
 - C. R. Keyport, Grayling.
 - And Alternates to succeed:
 - T. E. DeGurse, Marine City.
 - R. H. Denham, Grand Rapids.
 - (c) Place of Annual Session.
 - (d) President-elect.
 - (e) Speaker, House of Delegates.
 - (f) Vice-speaker, House of Delegates.
8. Adjournment.

Tuesday Afternoon, September 22, 1936

Invitational Golf, Detroit Golf Club
Baseball, Navin Field

Tuesday Evening, September 22, 1936

Grand Ball Room Book-Cadillac Hotel
Address: Society and Organized Medicine—CHARLES GORDON HEYD, Vice President, American Medical Association
Smoker. Wayne County Medical Society, Hosts Entertainment and Refreshments.

COUNTY SECRETARIES' CONFERENCE MICHIGAN STATE MEDICAL SOCIETY

Wednesday, September 23, 1936

English Grill, Mezzanine Floor
Book-Cadillac Hotel, Detroit

- 5:30 P. M. Convene.
- 6:00 P. M. Dinner. (Complimentary to Officers and Councilors of the Michigan State Medical Society and to Secretaries of County Medical Societies, who shall receive tickets through the mail—two weeks in advance.)
- 6:50 P. M. "How to Stimulate County Society Activities." (8 minutes)
DR. PHIL A. RILEY, Jackson.

- 7:00 P. M. "The Golden Opportunities of Preventive Medicine Procedures." (8 minutes)
DR. HENRY A. LUCE, Detroit.
- 7:10 P. M. "The Crying Need for Better Physician-Public Contact." (8 minutes)
WM. J. BURNS, LL.B., Executive Secretary, Michigan State Medical Society.
- 7:20 P. M. "Unauthorized Practice of Medicine by Insurance Companies, Clinics, Certain Utilities, Hospitals, Factories, and other Corporations." (8 minutes)
DR. FRED B. BURKE, Detroit.
- 7:30 P. M. "What Does the 1937 Legislature Hold for You as a Practitioner of Medicine?" (25 minutes)
DR. H. H. CUMMINGS, Ann Arbor.
- 8:00 P. M. Adjournment.

You Are Invited

REFERENCE COMMITTEES

On Officers' Reports

George Curry, Chairman	F. J. O'Donnell
William R. Clinton	Carl F. Snapp
Harvey Hanson	C. F. Tossach

On Report of Council

Stanley W. Insley, Chairman	B. R. Corbus
A. W. Blain	G. C. Stewart
J. J. Walch	K. M. Bryan
R. C. Jamieson	I. W. Greene

On Reports of Standing Committees

L. F. Foster, Chairman	A. E. Catherwood
R. S. Snowden	E. A. Stickley
R. L. Wade	Dean Denman
D. W. Hart	Otto Beck
F. T. Andrews	E. D. Spaulding
W. E. Tew	F. H. Cole
O. G. McFarland	A. B. Bower
D. J. O'Brien	O. D. Stryker

On Reports of Special Committees

Roy Holmes, Chairman	G. Broberg
H. G. Huntington	W. Joe Smith
A. W. Chase	G. C. Conkle
R. E. Spinks	C. E. Dutches
A. L. Callery	John Sundwall
	F. B. Burke
	E. F. Sladek

On Amendments to Constitution and By-Laws

William R. Torgerson, Chairman	H. W. Wiley
Frank Kelly	R. B. Harkness
	R. G. Cook

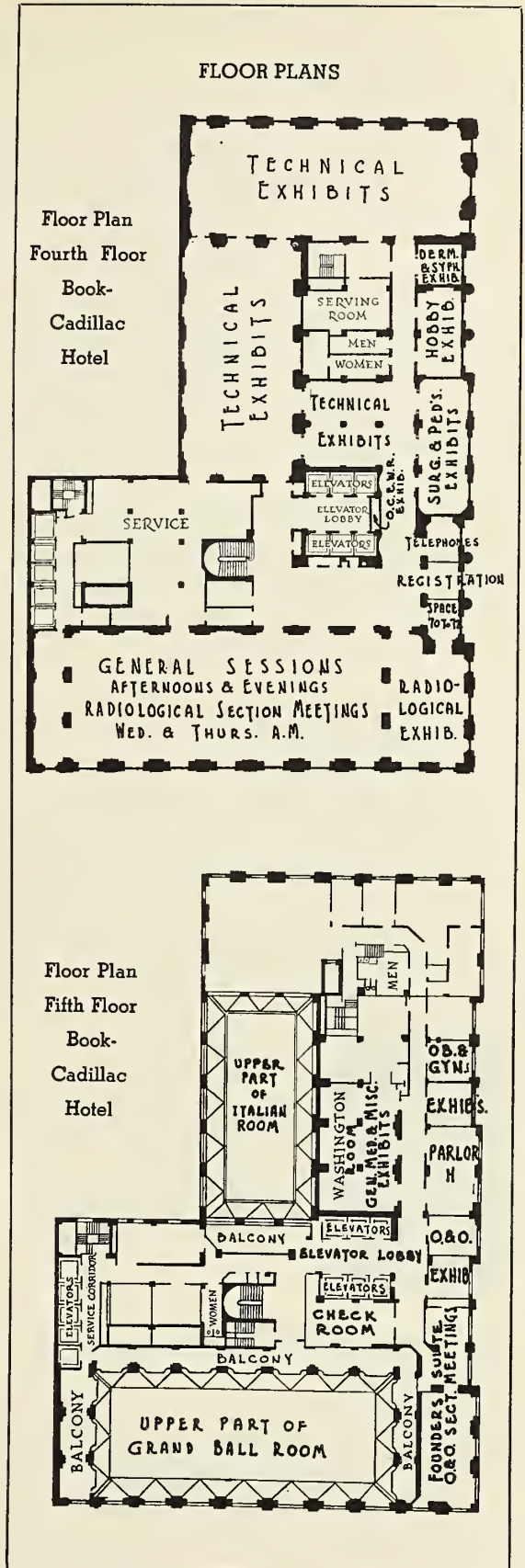
On Resolutions

L. G. Christian, Chairman	L. W. Switzer
T. K. Gruber	E. J. Evans
A. V. Wenger	O. G. Johnson
	Donald Brasie

Credentials Committee

A. G. Sheets, Chairman	C. R. Keyport
	W. D. Barrett

SEPTEMBER, 1936



PROGRAM

TUESDAY AFTERNOON

September 22, 1936

1:00 P. M.—Golf at Detroit Golf Club.

Baseball Game—Detroit
vs. St. Louis, Navin Field.

6:00 P. M.—Golfers' Dinner at Detroit Golf Club. Presentation of Golf Trophies.

Directions to reach Detroit Golf Club: Take Second Boulevard to fountain at entrance to Palmer Park, which is three blocks past Six Mile Road. Turn left, following Ponchartrain Drive about half a mile to the Club entrance.

Plan your time to study the 52 scientific exhibits. Leaders in the profession have spent time and money to portray scientific advances in medicine.

Seventy-two Technical Exhibitors have spent thousands of dollars to arrange displays of their contributions to medical practice. Attendants are not high pressure salesmen; they are here to show the latest advances in pharmaceutical progress and equipment. All exhibits open to the public Tuesday afternoon.

TUESDAY EVENING

First General Session

8:00 P. M.

Book-Cadillac Hotel
Grand Ball Room

Music by Rhythm Orchestra selected from
Wayne County Medical Society
Symphony Orchestra



Address:
Society and Organized
Medicine

CHARLES GORDON HEYD, *Vice
President of American Medical
Association, New York City*

9:30 P. M.

Smoker. Entertainment. Wayne County Medical Society, Host

Ballads by Harry McDonald

Novelties by Ford V-8 Octette and Tap Dancers

Concert and Novelty Specialties on the Hammond Electric Organ. Soloist and organ courtesy of Grinnell Brothers Music House

Magician

Refreshments

WEDNESDAY MORNING

September 23, 1936

SECTION MEETINGS

SECTION ON GENERAL MEDICINE

Harper Hospital

Chairman, R. L. NOVY, Detroit
Secretary, MYRTON S. CHAMBERS, Flint

A. M.

9:00

Therapeutic Results with the Newer Forms of Insulin
GORDON B. MYERS, Detroit
FRANK S. PERKIN, Detroit

9:30

Modern Treatment of Pneumonia
ALVIN E. PRICE, Detroit

10:00

Treatment of Ulcerative Colitis
H. B. STEINBACH, Detroit

10:30

Section Meeting
Chairman's Address:
Bacterial Endocarditis
R. L. NOVY, Detroit

11:00

Clinic: Faints and Fits
GEORGE HERRMANN, Galveston, Texas

SECTION ON SURGERY

Grace Hospital

Chairman, H. K. RANSOM, Ann Arbor
Secretary, R. L. MUSTARD, Battle Creek

A. M.

9:00

Symposium on "Acute Abdominal Disturbances"

9:30

Appendicitis
RAYMOND C. ANDRIES, Detroit

10:00

Cholecystitis
CLARK D. BROOKS, Detroit

10:30

Perforating Ulcer of the Stomach and Duodenum
H. K. SHAWAN, Detroit

11:00

Intestinal Obstruction
WM. J. CASSIDY, Detroit

11:30

Hernia
FRANK A. KELLY, Detroit
Discussion and Summary
FREDERIC A. COLLIER, Ann Arbor

SECTION ON OBSTETRICS AND GYNECOLOGY

Harper Hospital

Chairman, HAROLD MACK, Detroit
Secretary, J. DUANE MILLER, Grand Rapids

A. M.

9:00

Symposium on "Certain Complications of Pregnancy"

9:40

Tuberculosis
ROGER S. SIDDALL, Detroit

10:20

Heart Disease
WARD F. SEELEY, Detroit

11:00

Placenta Prævia and Abruptio Placentæ
A. E. CATHERWOOD, Detroit

11:40

Maternal Health Aspects
ALEXANDER M. CAMPBELL, Grand Rapids
Discussion

WEDNESDAY MORNING

September 23, 1936

SECTION MEETINGS—Cont'd

SECTION ON OPHTHALMOLOGY AND OTOLARYNGOLOGY

Book-Cadillac Hotel

Chairman, PARKER HEATH, Detroit
Secretary, DEWEY L. HEETDERKS, Grand Rapids

A. M.
9:00 Ophthalmology Round Table

C. S. O'BRIEN, *Professor of Ophthalmology, State University of Iowa College of Medicine, Iowa City, Iowa*

Otology Round Table

ISIDORE FRIESNER, *Otologist to Mount Sinai, New York City; Consultant Otologist to Bronx Hospital, Brooklyn M. E., Beth Moses, Beth El, and St. Joseph's-Far Rockaway*

10:30 Intermission

11:00 Both Round Tables will be repeated

P. M.
1:00 Section Luncheon

SECTION ON PEDIATRICS

Children's Hospital

Chairman, EDGAR E. MARTMER, Detroit
Secretary, C. R. DENGLE, Jackson

A. M.
9:00 A Bronchoscopic Study of Non-Tuberculous Childhood Diseases of the Lungs During a Five Year Period

WADSWORTH WARREN, Detroit
ARTHUR E. HAMMOND, Detroit

9:30 Mastoid Infection in Infants and Children

The New Concepts in Regard to Anatomy
Clinical Picture in Unusual Cases
Discussion of When to Operate
W. S. GONNE, Detroit

10:00 Appendicitis in Children

GROVER C. PENBERTHY, Detroit

A ten year study of appendicitis in infants and children as seen at the Children's Hospital of Michigan. During this period various methods of treatment have been used and a comparison of the results obtained is possible due to the length of time and number of cases studied.

10:30 Case Demonstrations. Selected cases of pediatric conditions will be demonstrated and discussed by

T. B. COOLEY, Detroit, and STAFF OF CHILDREN'S HOSPITAL OF MICHIGAN

11:00 Diseases of the Anus, Rectum and Colon in Children

LOUIS J. HIRSCHMANN, Detroit

11:30 Report of Iodized Salt Committee

D. M. COWIE, Ann Arbor

SECTION ON DERMATOLOGY

AND SYPHILOLOGY

Grace Hospital

Chairman, A. E. SCHILLER, Detroit
Secretary, G. WARREN HYDE, Detroit

A. M.

9:00 Symposium on "Allergic Eczemas"
Eczema, Urticaria and Allied Dermatoses
FRANZ BLUMENTHAL, University of Michigan

9:30 Infantile Eczema
Dermatophytids in Relation to Allergy
SAMUEL J. LEVIN, Detroit

10:00 The Relationship of Allergy to Some of the Dermatoses of Questionable Etiology
HARTHUR L. KEIM, Detroit

10:30 Allergic Skin Manifestations in Relation to Internal Disease
HAROLD C. ROBINSON, Grand Rapids

11:00 Desensitization in Allergic Skin Disease
GEORGE L. WALDBOTT, Detroit

11:30 Practical Hints on the Treatment of Disseminate Neurodermatitis
FRED WISE, New York City

SECTION ON RADIOLOGY

Book-Cadillac Hotel

Grand Ball Room

Chairman, VERNOR M. MOORE, Grand Rapids
Secretary, S. W. DONALDSON, Ann Arbor

A. M.
9:00 Symposium on Carcinoma of the Lung
Medical and Historical
WM. M. DONALD, Detroit

Pathology

O. A. BRINES, Detroit

Radiology

J. C. KENNING, Detroit

Treatment

T. LEUCUTIA, Detroit

10:30 Round Table Discussion
Topic: Occupational Diseases of the Lungs. Lead by
C. B. PEIRCE, Ann Arbor

12:00 Section Luncheon—Book-Cadillac Hotel
Business Session

SPECIAL DEMONSTRATION IN

TRAUMATIC SURGERY

Receiving Hospital

A. M.

9:00 Special Demonstration in Handling of the Injured Patient, Nerve and Tendon Suture, etc.

DEAN LEWIS, Baltimore, Maryland

VIEW THE EXHIBITS

WEDNESDAY AFTERNOON

September 23, 1936

Book-Cadillac Hotel

Grand Ball Room

Second General Session

2:00 P. M.

1. Hormones in Relation to Tumor Growth



DEAN LEWIS, *Professor of Surgery, Johns Hopkins School of Medicine, Baltimore, Maryland*

2. Ocular Symptoms and Signs of Brain Tumor



C. S. O'BRIEN, *Professor of Ophthalmology, State University of Iowa College of Medicine, Iowa City, Iowa*

Tumors of the brain or meninges are not uncommon. The ocular symptoms and signs of such lesions are of great importance in diagnosis and often of value in localization of the tumor. The optic pathways extend backward from the region beneath the frontal lobe to the posterior pole of the occipital lobe and hence may be affected by tumors in many areas. Choked discs are present in approximately 80 per cent of tumors

and changes in the fields of vision are very common. Optic atrophy, paralysis of the third, fourth, fifth, sixth or seventh cranial nerves, nystagmus and other signs may be associated with these tumors.

3. Skin Diseases in Their Relation to Disturbances of Other Organs



FRED WISE, *Professor of Clinical Dermatology and Syphilology, New York Postgraduate Medical School, Columbia University, New York City*

The main object is to focus attention on the fact that certain changes occurring in the skin are signposts of concomitant pathologic alterations affecting other organs. These changes led to the use of the phrase, "the skin, the mirror of the body." Unfortunately, this mirror fails to function as a reflecting object, on many occasions and under many diverse conditions. Pertinent examples of well-known

relationships and reciprocal pathology are jaundice and Addison's disease; much less-known examples are periungual fibromas associated with tuberose sclerosis; spinal curvature associated with Recklinghausen's disease; bone changes associated with Recklinghausen's disease and many other disease-relationships.

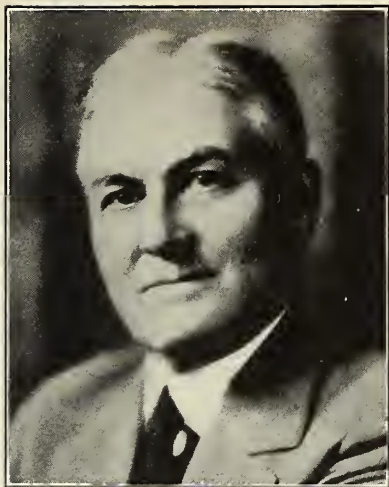
4. Further Studies of the Mechanism of Action and of the Relative Effectiveness of the Newer Diuretics



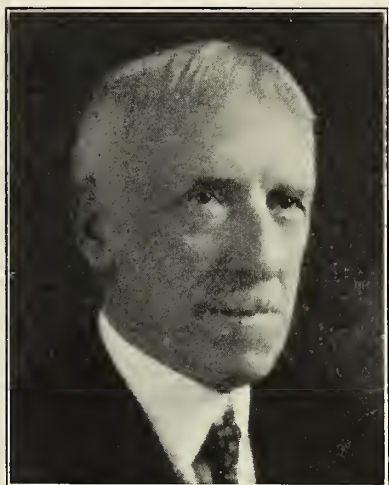
GEORGE HERRMANN, *Professor of Clinical Medicine, University of Texas School of Medicine, Galveston, Texas*

The mechanism by which diuresis is accomplished is still under discussion. We have gotten evidence by observing the clearance of creatinine and of D-xylose that suggest a direct renal action of both purine and mercurial diuretics. The purines acting primarily on the glomerular tuft and increasing filtration while the mercurials produce diuresis by affecting the tubular epithelium and decreasing reabsorption. Another series

of creatinine clearances in edematous patients with heart disease and an insulin study of similar nature is under way. Sodium and chloride studies as well as total serum protein estimations were carried out. The new combinations of xanthine and heavy metal, mercupurin and mercurin, offered as superior diuretics, have been subjected to comparative studies and found to show combined effects and to have definite advantages. Clinical results will be presented in charts and tables.



GEORGE W. CRILE
*Director Cleveland Clinic Foundation
Cleveland, Ohio*



ANDREW P. BIDDLE
*Ex-President Michigan State Medical Society
Detroit, Michigan*



THOMAS K. GRUBER
*President, Wayne County Medical Society
Detroit, Michigan*

WEDNESDAY EVENING

September 23, 1936

Book-Cadillac Hotel

Grand Ball Room

President's Night

Third General Session

President, GROVER C. PENBERTHY, presiding

1. Music. By the Wayne County Medical Symphony Orchestra

MR. GEORGES MIQUELLE, Director

2. Call to Order by the President

3. Invocation

S. S. MARQUIS, *Rector Christ Church, Cranbrook*

4. Announcements and Reports of the House of Delegates

5. Welcome to Detroit

HON. FRANK COUZENS, *Mayor*, and
THOMAS K. GRUBER, *President Wayne County Medical Society*

6. Presentation of Awards to Prize-winning Scientific Exhibitors

7. President's Address

GROVER C. PENBERTHY

8. Induction into Office as President

H. E. PERRY
Response

9. Introduction of the New Officers of the Michigan State Medical Society

10. The Andrew P. Biddle Oration

Comparative Anatomy and Pathologic Physiology of the Adrenal-sympathetic Complex Relating to the Genesis and Surgical Treatment of Essential Hypertension

GEORGE CRILE, *Cleveland, Ohio*

Evidence will be presented tending to show that essential hypertension is a pathologic physiology involving the sympathetic complex, the celiac and semilunar ganglia and the adrenal glands causing a pathologic tonus of the entire arterial system analogous to the pathologic tonus of the arteries of the extremities; mechanical stimulation of the sympathetic complex causes specifically a unique rise in blood pressure; flooding the complex with novocaine, manipulation of the complex during novocaine anesthesia causes no rise in pressure; ganglionectomy and denervation of the abdominal aorta causes the blood pressure in hypertension to return to the normal during the operation; operation is completed at one session; there is no disturbance of any other function of the organism. (With lantern slide demonstration.)

THURSDAY MORNING

September 24, 1936

SECTION MEETINGS—Cont'd

SECTION ON GENERAL MEDICINE

Harper Hospital

Chairman, R. L. NOVY, Detroit
Secretary, MYRTON S. CHAMBERS, Flint

- A. M.**
9:00 Hemiplegia. (Clinical and Neuro-pathological Material in 41 Cases)
LOUIS A. SCHWARTZ, Detroit
- 9:30 Pulmonary Embolism**
L. T. COLVIN, Detroit
- 10:00 Acute Pulmonary Edema and Nocturnal Dyspnea**
DOUGLAS DONALD, Detroit
- 10:30 Paroxysmal Arrhythmia**
EDWARD D. SPALDING, Detroit
- 11:00 Coronary Thrombosis**
HUGO A. FREUND, Detroit
- 11:30 Peripheral Vascular Accidents**
HENRY R. CARSTENS, Detroit
S. L. ADELSON, Detroit

SECTION ON OBSTETRICS AND GYNECOLOGY

Harper Hospital

Chairman, HAROLD MACK, Detroit
Secretary, J. DUANE MILLER, Grand Rapids

- A. M.**
9:00 Chairman's Address:
"Currents and Counter-currents"
HAROLD MACK, Detroit
- 9:30 Fundamentals of Treatment in Gynecology**
HARRY KIRSCHBAUM, Detroit
- 10:00 The Abuse of the Cautey**
B. W. MALFROID, Flint
- 10:30 Uterine Fibroids with Special Emphasis on Sequelæ of Treatment**
SPRAGUE GARDINER, Ann Arbor
- 11:00 Irradiation of the Pituitary in Ovarian Disfunction**
HARRY M. NELSON, Detroit
- 11:30 Pseudomalignant and Precancerous Lesions of the Uterus**
EMIL NOVAK, Baltimore, Maryland

A discussion (1) of pseudomalignant lesions of the cervix, especially the so-called squamous metaplasia; (2) the newer aspects of very early diagnosis of cervical cancer, with remarks on such "precancerous" lesions as leukoplakia and Bowen's, and also a brief consideration of such newer diagnostic methods as the Schiller-Lahm test and the colposcope; (3) the apparent relation of post-menopausal hyperplasia to adeno-carcinoma of the uterine body.

- P. M.**
1:00 Luncheon and Round Table
Election of Officers

SECTION ON SURGERY

Grace Hospital

Chairman, H. K. RANSOM, Ann Arbor
Secretary, R. L. MUSTARD, Battle Creek

- A. M.**
9:00 Breast Tumors
ROY D. McCLEURE, Detroit
- 9:30 Acute Empyema**
GROVER C. PENBERTHY, Detroit
- 10:00 Limitations of Transurethral Prostatectomy**
HARRY W. FLAGGEMEYER, Detroit
- 10:30 Surgical Relief of Carcinoma of the Colon**
LOUIS J. HIRSCHMANN, Detroit
- 11:00 Demonstration of a New Device for Closure of a High Intestinal Fistula**
JOHN B. HARTZELL, Detroit
- 11:10 Tumors of the Bladder**
WILLIAM E. KEANE, Detroit
- 11:30 Address**
GEORGE CRILE, Cleveland, Ohio

SECTION ON PEDIATRICS

Children's Hospital

Chairman, EDGAR E. MARTMER, Detroit
Secretary, C. R. DENGLER, Jackson

- A. M.**
9:00 Chairman's Address
EDGAR E. MARTMER, Detroit
- Section Meeting**
Election of Officers
- 9:30 Practical Points for Pediatricists**
PLINN MORSE, Detroit
- 10:00 The Effect of Accessory Foods and Food Factors on the Growth of Infants**
MARSH W. POOLE, Detroit
- 10:30 Influence of Obstetrical Procedures on the Weight Curve of the Newborn**
W. C. C. COLE, Detroit
- 11:00 The Control of Measles**
RICHARD CANNON ELEY, Boston, Massachusetts
Placental Extract (Immune Globulin-human): Use in the modification and prevention of measles. A warranted procedure. Age, dosage, potency and time of administration influence effectiveness. Reactions reported not sufficient to contraindicate its use. Administered orally the results, although favorable, not as striking. Further study necessary before the neutralizing substances for the virus of poliomyelitis and the toxins of diphtheria and scarlet fever can be considered to be of therapeutic value.

VIEW THE EXHIBITS

THURSDAY MORNING

September 24, 1936

SECTION MEETINGS—Cont'd

**SECTION ON OPHTHALMOLOGY
AND OTOLARYNGOLOGY**

Book-Cadillac Hotel

Founders' Suite

Chairman, PARKER HEATH, Detroit

Secretary, DEWEY L. HEETDERKS, Grand Rapids

A. M.
**9:00 Impressions of Artificial Fever Therapy
as Applied to Ophthalmology**

ELMER L. WHITNEY, Detroit

9:20 Treatment of Certain Corneal Lesions

NEIL BENTLEY, Detroit

**9:40 The Management of Non-inflammatory
Glaucoma**

WALTER R. PARKER, Detroit

**10:00 Treatment of Ocular Inflammations with
Increased Intraocular Typhoid Anti-
body Concentration**



ALBERT L. BROWN,
Cincinnati, Ohio

**10:20 Reconstructive Surgery of the Eyelids—
Evolution and Methods**

FERRIS SMITH, Grand Rapids

**10:40 The Background of Acute Respiratory
Obstruction Including Asthma**

JAMES MILTON ROBB, Detroit

11:00 Chairman's Address

PARKER HEATH, Detroit

**11:20 The Medical Treatment of Meniere's
Symptom Complex**

A. C. FURSTENBERG, Ann Arbor

**11:40 Management of Rupture of the Lateral
Sinus Following Acute Mastoiditis**

JACOB S. WENDEL, Detroit

**12:00 Therapeutic Indications for Broncho-
scopy. (Diagnosis and treatment of dis-
eases of lung other than foreign bodies)**

WADSWORTH WARREN, Detroit
ARTHUR E. HAMMOND, Detroit

**12:20 The Management of Chronic Suppera-
tive Otitis Media**

OLIVER B. MCGILLICUDDY, Lansing

**12:40 Therapeutic Relation of Chronic Sinus
Disease to Headaches**

CARL C. MCCLELLAND, Detroit

Short Executive Session

**SECTION ON DERMATOLOGY
AND SYPHILOLOGY**

Grace Hospital

Chairman, A. E. SCHILLER, Detroit
Secretary, G. WARREN HYDE, Detroit

A. M.

**9:00 Chairman's Address:
The Role of Dermatologists in Indus-
try**

A. E. SCHILLER, Detroit

9:20 Modern Treatment of Syphilis

FRANK STILES, Lansing

9:50 Discussion

RAY S. DIXON, Detroit

**10:00 Toxicodermatoses with Special Refer-
ence to Lupus Erythematoses**

LOREN W. SHAFFER, Detroit

10:30 Discussion

UDO J. WILE, Ann Arbor

10:40 Clinic and Discussion of Cases

Chairman: C. K. VALADE, Detroit
Assistant Chairman: WM. G. SAUNDERS, Detroit
Committee:

- (1) GEORGE VAN RHEE, Harper Hospital
- (2) JOHN H. COBANE, Harper Hospital
- (3) J. R. ROGIN, Receiving Hospital
- (4) R. A. C. WOLLENBERG, Eloise Hospital
- (5) FRANK R. MENAGH, Ford Hospital
- (6) T. H. MILLER, North End Clinic

**12:00 A Brief Sectional Meeting for Election
of Officers for the Ensuing Year**

SECTION ON RADIOLOGY

Book-Cadillac Hotel

Grand Ball Room

Chairman, VERNOR M. MOORE, Grand Rapids
Secretary, S. W. DONALDSON, Ann Arbor

A. M.

**9:00 Chairman's Address:
The Function and Responsibility of
the Radiologist in Medical Practice**

VERNOR M. MOORE, Grand Rapids

9:30 Radiation Therapy in Dermatology

CLYDE K. HASLEY, Detroit

**10:00 Encephalography in Spastic and Con-
vulsive Conditions**

FREDERIC SCHREIBER, Detroit
LAWRENCE REYNOLDS, Detroit

**11:00 The Differential Diagnosis of Benign
from Malignant Ulcerative Lesions of
the Stomach**

B. R. KIRKLIN, Rochester, Minnesota

SYMPOSIUM ON FRACTURES

Receiving Hospital

A. M.

**9:00 Conducted by Orthopedic Service, Re-
ceiving Hospital**

ALFRED D. LA FERTE, Chief, Detroit.

VIEW THE EXHIBITS

THURSDAY AFTERNOON

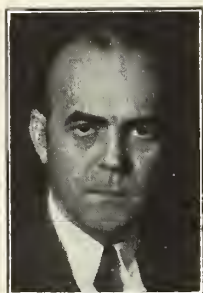
September 24, 1936

Fourth General Session

Book-Cadillac Hotel

2:00 P. M.

1. The Clinical Application of a Coagulant Substance Obtained from the Human Placenta



RICHARD CANNON ELEY, *Member of Faculty of the Harvard Medical School, Boston, Massachusetts*

An extract which possesses strong coagulant properties has been obtained from the human placenta. When administered orally to normal individuals, and to some patients suffering from hemophilia, there is a reduction in the coagulation time of the venous and capillary blood. The duration of the effect in the patients with hemophilia is variable although it usually persists for 48 to 72 hours. The topical and oral use of the blood coagulant extract has been of value both

as a prophylactic and therapeutic procedure in certain surgical conditions. Whether a coagulant extract obtained from human tissues will be more effective than similar extracts obtained from animal tissues has not been established.

2. Selection of Patients for Roentgenologic Examination of the Alimentary Canal



B. R. KIRKLIN, *Professor of Radiology and director of the Division of Radiology, Mayo Foundation, University of Minnesota Graduate School of Medicine, and Chief of the Section on Roentgenology, Mayo Clinic, Rochester, Minnesota*

In too many instances roentgenologic examination of the alimentary canal is not requested unless the patient's symptoms are severe, chronic, variously combined, and strongly indicative of grave disease. Such disease, including early cancer, often gives rise to symptoms that are mild, single, or not definitely cited in proof. These cases indicate that certain symptoms, regardless of severity or duration, should be regarded as imperative signals for roentgenologic examination, and argue for more common employment of the roentgenologic test, in order to enhance diagnostic accuracy and to disclose disease of the digestive tract more opportunely.

ly chronic, and cases are indicated that certain symptoms, regardless of severity or duration, should be regarded as imperative signals for roentgenologic examination, and argue for more common employment of the roentgenologic test, in order to enhance diagnostic accuracy and to disclose disease of the digestive tract more opportunely.

3. The Endocrines in Gynecology and Obstetrics



EMIL NOVAK, *Associate Professor of Obstetrics, Johns Hopkins School of Medicine, Baltimore, Maryland*

A brief sketch of the normal endocrinology of the reproductive cycle, and of those departures from the normal which bring about various functional gynecological disorders. Bearing of these facts upon the practical treatment of these disorders.

SCIENTIFIC EXHIBITS

GENERAL MEDICINE

Fetal Hypoglycemia Due to Hyperinsulinism

Space: Washington Room, Fifth Floor

WILLIAM HENRY GORDON, Detroit

Pathologic findings in the pancreas of babies born from diabetic mothers; results of the research on pregnant bitches after removal of their pancreas; results of studies "by giving the diabetic mother a proper diet early in pregnancy", showing six patients who are now mothers of normal babies.

Agranulocytosis

Space: Washington Room, Fifth Floor

WILLIAM HENRY GORDON, Detroit

Study of 66 patients with a review of about 900 papers on the subject. Diagrams of the etiology, history, symptomatology; different treatments which have been given and the treatment found to be most effectual; showing the decrease in the mortality from 80 per cent to about 20 per cent in the last 26 cases of the real disease.

The Diagnosis of Allergic Asthma

Space: Washington Room, Fifth Floor

S. W. INSLEY, Detroit

Charts for aid in differential diagnoses; mounted specimens of hay-fever causing plants; microscopic slides of various hay-fever causing pollens; specimens of dust, lint and fungal spores; x-ray films; method of collecting dust and making pollen count of the air; method of testing for hypersensitivity; Diet Diary; general outline of treatment.

Present Status in the Treatment of Peptic Ulcer

Space: Washington Room, Fifth Floor

DAVID J. SANDWEISS, Detroit

Results obtained with diet (ambulatory and bed-rest), surgery, injections of vaccine, histidine (Larostidin), emetine (Synodal) and distilled water injections; also oral administration of silicon dioxide (sand).

A series of 291 patients with peptic ulcer were treated during 1,019 ulcer attacks with the various methods listed above. Material studied consisted of patients treated at North End Clinic, at Out-patient Department, Harper Hospital, and in private practice. Injections as a rule were given when patients did not respond to the standard dietary management, but some patients were given injections on their first visits and were told to continue with the dietary regimen they had before reporting for treatment. Comparative immediate and remote results are given in chart form. A mimeographed pamphlet with detailed instructions as to diet, recipes, alkalis, antispasmodics and general instruction in the management of patients with peptic ulcer will be available for physicians visiting this exhibit.

A Better Organization of Pathological Specimens, Illustrating Fundamental Changes Under Seven Groupings and Twelve Systems

Space: Washington Room, Fifth Floor

JAMES E. DAVIS, Wayne University, Detroit

Therapeutic Diets

Space: Washington Room, Fifth Floor

MARY M. HARRINGTON, Dietitian, Harper Hospital

Exhibit material will consist of charts and food displays. The purpose of this exhibit is to emphasize the normal maintenance diet in actual foods and to present graphic and food illustrations of its modifications as used in diet therapy. The normal diet, diabetic diet, low residue diet and several types of reduction diets will be the extent of the exhibit.

Modern Treatment of Pneumonia

Space: Washington Room, Fifth Floor

ALVIN E. PRICE and OSBORNE A. BRINES, Detroit

The exhibit will deal with pneumonia typing both from a laboratory viewpoint and also as to the distribution of all of the thirty-two types in this community. Comparison of

VIEW THE EXHIBITS

mortality locally and elsewhere will be included. Indications and results of serum therapy will constitute an important part of the exhibit and the effect of oxygen therapy and nursing will be illustrated.

Crystalline Insulin

Space: Washington Room, Fifth Floor
S. S. ALTSHULER, Eloise Hospital, Eloise, Michigan

Charts illustrating the comparative effects of standard insulin and crystalline insulin in non-diabetic and in diabetic patients; the more gradual and more sustained action of the crystalline insulin; and the control of diabetic patients with fewer injections by the use of crystalline insulin.

Common Complications of Arteriosclerosis

Space: Washington Room, Fifth Floor
J. L. CHESTER, Eloise Hospital, Eloise, Michigan

Photographs of the lesion in arteriosclerosis affecting the arteries of (1) brain, (2) heart, and (3) leg. Relationship to hypertension.

Brucellosis (Undulant Fever)

Space: Washington Room, Fifth Floor
S. E. GOULD, Eloise Hospital, Eloise, Michigan
I. F. HUDDLESON, Michigan State College, East Lansing, Mich.
Charts illustrating etiology, diagnosis and treatment. An interne will be in attendance to explain the intradermal test and the use of therapeutic agents. A technician will demonstrate the rapid agglutination and the opsonocytaphag tests, and the method of bacterial culture.

Eloise Parole Clinic

Space: Washington Room, Fifth Floor
M. H. HOFFMANN, Eloise Hospital, Eloise, Michigan
Charts and diagrams illustrating the activities of the Eloise Parole Clinic in supervising paroled patients; and the integration of the Clinic with other public agencies concerned in the care and supervision of mental patients. Statistical data showing incidence, treatment, and disposition of psychiatric problems occurring in Wayne County.

The Laparoscope

Space: Washington Room, Fifth Floor
T. N. HORAN, Eloise Hospital, Eloise, Michigan
An instrument for the examination and diagnosis of intra-abdominal disease. Exhibit of instrument with charts indicating its uses and diagrams illustrating technic.

Experimental Plumbism Induced by Lead Therapy for Cancer

Space: Washington Room, Fifth Floor
H. J. KULLMAN, Eloise Hospital, Eloise, Michigan
The Basophilic Aggregation count, technic, photomicrograph. The lead line. Charts of treated cases.

Pectoral Muscle Biopsy in Hypertension

Space: Washington Room, Fifth Floor
M. R. MCQUIGGAN, Eloise Hospital, Eloise, Michigan
Photographs illustrating relation of arteriole lesions in pectoral muscle biopsies to hypertension.

The Polygraph in Lie Detection

Space: Washington Room, Fifth Floor
LOWELL S. SELLING and J. A. LARSON, Eloise Hospital, Eloise, Michigan
Demonstration of the "lie detector" with illustrative charts.

Hypertension and Kidney Disease

Space: Washington Room, Fifth Floor
F. A. WEISER, Eloise Hospital, Eloise, Michigan
Photographs illustrating relationship of essential hypertension to kidney disease and chronic glomerulo-nephritis to hypertension.

The Findings in Gastritis

Space: Washington Room, Fifth Floor
RICHARD CAMPBELL CONNELLY, Detroit
Exhibit consists of gross and microscopic specimens and x-ray films with pathological and diagnostic material and charts demonstrating characteristic pathological and radiological findings.

SURGERY

Tumors of the Small Intestine

Space: Normandie Room, Fourth Floor
JOHN G. MATEER, H. P. DOUB, and F. W. HARTMAN, Henry Ford Hospital, Detroit
The exhibit will include clinical, x-ray and pathological studies on the various tumors of the small intestine.

Varicose Veins

Space: Normandie Room, Fourth Floor
EUGENE A. OSIUS, EDWARD H. LAUPPE and C. N. WELLER, Detroit
Exhibition of the methods and results obtained in the treatment of varicose veins and varicose ulcers, using the injection method supplemented by ambulatory ligation of the internal saphenous and adjunct methods.

Traumatic Neurosurgery

Space: Normandie Room, Fourth Floor
E. S. GURDJIAN, Detroit
Presentation of operative cases of head injury. Over 200 operated cases have been used. Other pertinent features of the clinical manifestations and treatment of head injury are also included. Traumatic myelitis is also described and discussed pictorially. This is based on about 125 cases. Peripheral nerve injuries are also exhibited. This is divided into sectioned nerves, progressive traumatic neuritis of certain nerves, and nerve dysfunction associated with fractures and dislocations of long bones.

Hæmaturia

Space: Washington Room, Fifth Floor
ROBERT A. MACARTHUR, Detroit
The exhibit includes the methods of diagnosis of the causes of hæmaturia by the means of a cystoscope and x-ray plates. The entire field of hæmaturia is covered by means of 200 transparencies of x-ray plates and pathological specimens of the various diseases causing hæmaturia.

Treatment of Common Forms of Cancer

Space: Washington Room, Fifth Floor
WM. J. SEYMOUR and J. M. GRACE, Eloise Hospital, Eloise, Michigan
Colored transilluminated diagrams of principal organs of body. Various colors indicate whether preferred method of treatment in these sites is (1) surgical, (2) radiotherapeutic, or (3) a combination of surgery and radiation.

Transurethral Prostatic Resection

Space: Washington Room, Fifth Floor
WM. L. SHERMAN, Eloise Hospital, Eloise, Michigan
Diagrams illustrating common types of prostatic obstruction before and after transurethral resection. Photographs of technic.

Clinical and Pathological Records

Space: Normandie Room, Fourth Floor
R. E. CUMMING, G. E. CHITTENDEN, C. F. SCHROEDER, J. M. TREADEAU, Detroit
Chart Display. Also: Graphic case records illustrating importance of complement fixation reactions.

Hemopneumothorax

Space: Normandie Room, Fourth Floor
ALPHEUS F. JENNINGS, Detroit
X-ray demonstration of a case of left interlobar hemopneumothorax showing resorption after dense pleural thickening and massive fibrin formation.

Cholecystographic Studies

Space: Normandie Room, Fourth Floor
A. F. JENNINGS, L. F. WILCOX, Detroit
An exhibit of cholecystograms with a description of technique.

Complement Fixation Test

Space: Normandie Room, Fourth Floor
S. WILLARD WALLACE, Detroit
Demonstration of the use of the complement fixation test in cases of streptococcus, staphylococcus and Bacillus coli infections, and studies of the reticulo-endothelial cell system in chronic infection.

Demonstration of Cast Rubber Button for Closure of Intestinal Fistula

Space: Normandle Room, Fourth Floor

JOHN B. HARTZELL, Detroit

OBSTETRICS AND GYNECOLOGY

Hystero-Mucography

Space: Parlor "I", Fifth Floor

J. DUANE MILLER and T. O. MENEES, Grand Rapids

Exhibit consists of original films illustrating the important intrauterine lesions. Also demonstration of the control of radium application by use of the hystero-gram.

Sterility in the Female

Space: Parlor "I", Fifth Floor

HARRY A. PEARSE, Detroit

The etiologic factors concerned in sterility are enumerated. Whenever possible the treatment, whether by drug therapy or surgical procedures, will be depicted. The Rubin tracings compared with lipiodol as diagnostic procedures will be contrasted. An ancient diagnostic method proves the problem an old one.

Trichomonas Vaginalis

Space: Parlor "J", Fifth Floor

J. CAMPBELL SMITH, Detroit

Culturing, staining, identification, with methods of treatment.

Recording Uterine Contractions

Space: Parlor "J", Fifth Floor

ALBERT PARKER, Wayne, Michigan

Graphical study of uterine contractions. Apparatus shown may be used for more than one case at a time, may be used before full term pregnancy and does not alter contractions of the uterus. Some characteristic findings are exhibited.

OPHTHALMOLOGY AND OTOLARYNGOLOGY

Plastic and Reconstructive Surgery

Space: Parlor "F", Fifth Floor

CLAIRE L. STRAITH and WILLIAM A. LANGE, Detroit

Exhibit of photographs showing technic and results in plastic surgery. Special emphasis is placed on the treatment of crushing facial injuries such as those so often encountered by surgeons in treating victims of motor car accidents; apparatus will be shown which will hold facial bone fragments and reshape crushed faces.

The Background of Acute Asthma

Space: Parlor "F", Fifth Floor

J. MILTON ROBB, Detroit

Absolute and complete obstruction of the respiratory tract, in which no oxygen reaches the lung, will destroy life in two or three minutes. Luckily a patient with this situation only occasionally presents himself for treatment in the life of any practitioner, but when he does, it is the most harassing situation which can possibly confront him.

There is, however, a less severe condition that occasionally is seen in every one's practice, but chiefly in those interested in the respiratory mechanism. In this condition a small amount of oxygen reaches the lung, presenting the symptoms of suffocation. It must be recognized that embarrassment of respiration may come from distant parts of the body structure. It is, therefore, necessary that the physician have at his finger tips the most likely causes of this obstruction.

In the exhibit, we have tried to depict by diagrams, pathological specimens, etc., many of the possible causes.

Experimental Uveitis and Corneal Ulcers

Space: Parlor "G", Fifth Floor

ALBERT L. BROWN, Children's Hospital Research Foundation, Cincinnati, Ohio

Exhibit of gross specimens, photographs and photomicrographs showing uveitis produced in rabbits' eyes; corneal ulcers, produced in rabbits' eyes, showing ulcers in un-

treated animals and in animals treated with parenteral administration of typhoid vaccine with and without aspiration of the anterior chamber to increase intra-ocular antibody concentration.

Tumors of the Eyelids

Space: Parlor "G", Fifth Floor

A. E. BRALEY, State University of Iowa, College of Medicine, Iowa City, Iowa

Exhibit of transparent colored photographs and stereophotographs of tumors of the eyelid; charts showing frequency, location and differential diagnosis.

Arachnodactyly in Its Relationship to Status Dysraphicus

Space: Parlor "F", Fifth Floor

RALPH H. PINO, Detroit

A photographic exhibit of the chief clinical signs of arachnodactyly and status dysraphicus designed to bring these two unusual syndromes to the attention of the general practitioner and to point out their clinical similarity to each other.

Fundoscopy Lesions

Space: Washington Room, Fifth Floor

FRANK L. RYERSON, Eloise Hospital, Eloise, Michigan

Photographs of common retinal lesions.

PEDIATRICS

Surgery of Childhood

Space: Normandle Room, Fourth Floor

GROVER C. PENBERTHY and C. N. WELLER, Children's Hospital, Detroit

Surgical Complications of Acute Exanthemata

Space: Normandle Room, Fourth Floor

GROVER C. PENBERTHY and EUGENE A. OSIUS, Herman Kiefer Hospital, Detroit

This exhibit will cover the general surgical treatment of complications in the exanthemata as carried on at the Herman Kiefer Hospital, Detroit.

DERMATOLOGY AND SYPHILOLOGY

Transparencies of Tuberculosis and Tuberculids of the Skin

Space: Parlor "D", Fourth Floor

T. H. MILLER, Detroit, in charge. An exhibit of the Detroit Dermatological Society

The exhibit consists of thirty-four photographic transparencies. In this collection are cases illustrating the clinical aspects of cutaneous tuberculosis of various types, including those of hematogenous origin as well as those produced by external inoculation. Several examples of toxi-tuberculids are also included.

Skin Diseases in Industry

Space: Parlor "D", Fourth Floor

E. C. TROXEL, Detroit, in charge. An exhibit of the Detroit Dermatological Society, through the courtesy of United States Public Health Service

The exhibit consists of charts showing causes, photographs of various types of cases, moulages of cases, samples of articles and chemicals causing industrial dermatoses.

Moulages on Syphilis

Space: Parlor "D", Fourth Floor

J. R. ROGIN, Detroit, in charge. An exhibit of Detroit Dermatological Society, through the courtesy of the Detroit Department of Health

A collection of moulages prepared by the Detroit Department of Health and graphically depicting the various types of cutaneous lesions representative of the primary and secondary stages of syphilis. Also charts showing the incidence of venereal disease in Detroit.

VIEW THE EXHIBITS

RADIOLOGY

Hematogenous Non-Miliary Pulmonary Tuberculosis

Space: Reception Room, Fourth Floor

W. L. BROSIUS and C. C. BIRKELO, Herman Kiefer Hospital, Detroit

Exhibit consists of reductions of x-ray films and photographs and micro-photographs of pathological specimens. An attempt is made in this exhibit to show the course of this type of tuberculosis infection, in several selected cases, where the diagnosis of pulmonary tuberculosis has been definitely established. An attempt is also made to differentiate this condition from the miliary type of tuberculosis, metastatic malignancy and occupational fibrosis.

Roentgen Exploration of Patients with "Indigestion"—"Gastritis"—"Gas on the Stomach"—"Colitis"

Space: Reception Room, Fourth Floor

HANS A. JARRE, Grace Hospital, Detroit

To treat patients with intestinal distress under such indefinite diagnoses as "Indigestion," "Gastritis," "Gas on the Stomach," "Colitis" is meaningless, obsolete, and not infrequently disastrous. A well performed roentgen-exploration of the alimentary canal should in the large majority of these patients reveal either some definite type of disease of the alimentary canal or normal structure and function of this system. Therapeutic efforts based upon a carefully evaluated correct diagnosis usually lead to much more satisfactory results and less disappointments. Sixty roentgen explorations of various types of disease of the alimentary canal are shown.

The Peristalsis of the Renal Pelvis and the Influence of Infection in Various States on this Activity

Space: Reception Room, Fourth Floor

HANS A. JARRE and R. E. CUMMING, Grace Hospital, Detroit

Roentgen experiments with serial pyelography demonstrated that a rhythmic progressive descending peristalsis empties the normal renal pelvis of its liquid content. The "alternating" type of renal peristalsis described by Legueu and his associates must be considered abnormal or pathologic. Pyelonephritis produces a characteristic alteration of renal

peristalsis which ranges from "alternating" peristalsis over inhibition to complete organic immobilization, depending on virulence, duration, location, and type of infection, and the reaction between infecting agents and infected hosts. Perireteritis produces a characteristic obstruction type peristalsis of the proximal segments of the urinary passages. Classification of infection of the urinary passages.

Roentgen-findings in Some Patients with "Blood in the Urine" (Tumors of the Urinary Tracts)

Space: Reception Room, Fourth Floor

HANS A. JARRE, Grace Hospital, Detroit

"Blood in the urine" often is a symptom of tumor somewhere in the urinary passages. Roentgen-findings are shown of about forty tumors of the urinary tract, benign and malignant.

Primary Carcinoma of the Lung

Space: Reception Room, Fourth Floor

J. C. KENNING, O. A. BRINES, J. E. LOFSTROM and H. L. WEITZ, Receiving Hospital, Detroit

A short statistical summary of cases, with a history, x-rays, gross and microscopical reductions of each case. In all, there will be approximately 52 cases.

The Elimination of Gas Shadows in the Intestinal Tract by Use of Pitressin

Space: Reception Room, Fourth Floor

J. C. KENNING and J. E. LOFSTROM, Receiving Hospital, Detroit

This exhibit consists mainly of KUB, Gall Bladder and Pyelogram reductions before the use of Pitressin and after.

Giant-Cell Bone Tumor

Space: Reception Room, Fourth Floor

CARLETON B. PEIRCE, University Hospital, Ann Arbor

Giant cell bone tumors in Roentgenograms and photo-micrographs showing the effect of treatment by surgery or roentgen-therapy or a combination of these methods.

Encephalograms

Space: Reception Room, Fourth Floor

FREDERIC SCHREIBER, Detroit

Exhibit consists of encephalograms demonstrating various intracranial lesions; also pathologic specimens with their corresponding encephalograms. Material from Harper Hospital, Children's Hospital of Michigan and Receiving Hospital of Detroit.

Supervoltage Roentgen Therapy

Space: Reception Room, Fourth Floor

DEPARTMENT OF RADIOLOGY, Harper Hospital, Detroit

To show the type of installation which is employed at Harper Hospital in supervoltage roentgen therapy; also to present charts, physical measurements and other data pertaining to its application in the treatment of malignancy. Supervoltage roentgen therapy has definite value in the treatment of certain types of malignancy, particularly when used in conjunction with lower voltage roentgen therapy and radium therapy.

Treatment of Common Forms of Cancer

Space: Washington Room, Fifth Floor

WM. J. SEYMOUR and J. M. GRACE, Eloise Hospital, Eloise, Michigan

Colored transilluminated diagrams of principal organs of body. Various colors indicate whether preferred method of treatment in these sites is (1) surgical, (2) radiotherapeutic, or (3) a combination of surgery and radiation.

MISCELLANEOUS

Highway First Aid and Accident Prevention Program

Space: Italian Garden, Fourth Floor

OAKLAND COUNTY CHAPTER, AMERICAN RED CROSS

Charts and photographs on accident prevention. First aid station markers. Attendant will outline organization plan and scope of 887 first aid stations in 45 states, demonstrate equipment and explain operation. In Oakland County this program has had the cooperation of the Oakland County Medical Society and the local members of the Fracture Committee of the American College of Surgeons.

Mental Hygiene, Past and Present

Space: Corridor, Fifth Floor

COMMITTEE ON MENTAL HYGIENE, M. S. M. S.

Basic Science Law

Space: Corridor, Fourth Floor

LEGISLATIVE COMMITTEE, M. S. M. S.

Relief Medicine in Oakland County

Space: Corridor, Fourth Floor

OAKLAND COUNTY EMERGENCY WELFARE RELIEF COMMISSION

An exhibit of the medical program conducted in Oakland County. This exhibit will show in detail how the various services are authorized and paid for together with a complete tabulation of costs over a period of two years.

Two Years' Experience of Wayne County Medical Service Bureau

Space: Corridor, Fourth Floor

Hobby Exhibit

Space: Parlor C, Fourth Floor

Sponsored by Woman's Auxiliary
MRS. M. D. VOKES, Chairman

INSPECT THE 124 EXHIBITS

TECHNICAL EXHIBITS

- The Akron Truss Company** **Space 21**
Detroit, Michigan
 Complete showing of Surgical Appliances including Akron Trusses, Belts, Surgical Corsets, Orthopedic Braces, Limbs, Hosiery, etc. Mr. Ed. W. Alexander, Manager, and Mrs. C. T. Roache, Surgical Fitter, will be on duty in Booth No. 21 to explain the new improvements of Akron Appliances. Twenty-one years' service to Michigan Physicians makes this the foremost exhibit of its kind.
- A. S. Aloe Company** **Space 84**
St. Louis, Missouri
 A. S. Aloe Company will display a complete line of instruments, equipment, and everything for the doctor and hospital. Of special interest will be demonstrations of the Aloe Short Wave Diathermy, the Elliott Treatment Machine and other specialties. A special discount on rustless steel instruments will be offered during the convention. Mr. C. R. Habermas, Aloe representative in this territory, will be in attendance to serve in any way possible.
- The Arlington Chemical Company** **Space 37**
Yonkers, New York
 The Arlington Chemical Company is among the pioneers in the production of ethical pharmaceutical and biological preparations for the medical profession. In addition to the line of pharmaceuticals on display, attention is especially directed to the special offer on diagnostic protein sets. These sets contain 80 and 112 proteins and are supplied with handsome holders and leatherette cases. Prices \$25.00 and \$35.00 respectively. Dr. J. H. Frazer, Director of the Biological Department, who has charge of the booth, will be pleased to discuss allergic problems.
- The Bard-Parker Company, Inc.** **Space 66**
Danbury, Connecticut
 The Bard-Parker Company will demonstrate the outstanding features of their Rib-Back blade incorporating new standards of cutting efficiency and economy. Also will be shown a complete line of stainless steel scissors with renewable edges which eliminates resharpening, and a selection of quality forceps with the Lahey lock.
- Beasley-Eastman Laboratories, Inc.** **Space 38**
Detroit, Michigan
 Wm. A. Habermas, well known figure in the Surgical supply field, will be in charge of the Beasley-Eastman Laboratories, Inc. exhibit. "Bill" as he is known to his host of friends in the profession, is offering the Eastman Ultra Short Wave Equipment in two reasonably priced models.
- Brownie Food Company** **Space 19**
Detroit, Michigan
 We welcome you, Michigan Physicians, at Booth No. 19. Brownie Strained Baby Foods are freshly packed in 4½ oz. glass jars. They are carefully and scientifically prepared from the choicest materials, thus preserving the important elements all babies need. The J. L. Hudson Company and independent stores merchandise the Brownie Foods in Detroit.
- The Cilocon Corporation** **Space 29**
Detroit, Michigan
 An entirely new idea in nursing nipples will be demonstrated by The Cilocon Corporation, Detroit, manufacturers of this new nipple, called Nurs-Rite. The special feature of the nipple is a valve of patented design which admits air into the bottle as the child withdraws the fluid, thus preventing air-swallowing, and consequently air-colic.
- Coca-Cola Company** **Space 58**
Atlanta, Georgia
 Space No. 58 has been reserved by the Coca-Cola Company
- R. B. Davis Company** **Space 51**
Hoboken, New Jersey
 You are invited to visit Exhibit No. 51. Not only will you be cordially welcomed, but you will be served delicious Cocomalt—Hot or Cold—as you choose. Come early—come often.
- DePuy Manufacturing Company** **Space 22**
Warsaw, Indiana
 DePuy Manufacturing Company will be with us again at the Michigan State Medical meeting and will greet all doctors with a great deal of pleasure. Many new appliances for treating fractures will be shown. Physicians are invited to call at Booth 22 and discuss any fracture problems with Mr. Charles F. Klingel.
- Detroit Dairy & Food Council** **Space 55**
Detroit, Michigan
 Detroit Dairy & Food Council will cooperate with the Michigan State Medical Society conducting an educational exhibit at the convention in September. The Detroit Dairy & Food Council and the Medical Society have one thing in common and that is the promotion of correct health habits by providing a better understanding of proper diet. The Detroit Dairy & Food Council is an educational organization supported by the Milk producers and distributors in this vicinity. The Council was organized in 1925 for the purpose of bringing newer knowledge of nutrition to all consumers and give dairy products their proper place in the diet.
- The DeVilbiss Company** **Space 25**
Toledo, Ohio
 A complete line of DeVilbiss Atomizers for professional and home use will be on display at the Detroit Convention of the Michigan State Medical Society to be held on September 21 to 24, inclusive, at The Book-Cadillac Hotel, Detroit, Michigan. Several recent additions to the line will be included. A prominent feature of the exhibit will be a display of x-rays made under ethical supervision demonstrating the superiority of an atomizer in applying solutions to the nose and throat. Bound folders describing the details of the x-ray experiments may be secured from the DeVilbiss representative. Mr. J. Bates will be in charge of the DeVilbiss display.
- The Do/More Chair Company** **Space 27**
Elkhart, Indiana
 The Do/More Chair Company's exhibit at the convention of the Michigan State Medical Society will be for the purpose of keeping doctors informed of progress and to make explanation of pertinent matters. Executive and clerical models will be shown. Mr. F. L. Turner, Educational Director, will be in charge.
- Dy-Dee Wash, Inc.** **Space 2**
Detroit, Michigan
 Cyril B. Lewis, the organizer and president of Dy-Dee Wash, Inc., will be present to greet his many friends in the medical profession and to answer all questions in regard to the Dy-Dee washing and sterilizing methods as well as any other pertinent inquiries physicians may have.
- Encyclopædia Britannica** **Space 8**
Detroit, Michigan
 Introducing new 1936 Encyclopædia Britannica, most beautiful edition ever compiled appearing on its 168th birthday. This new Britannica is being offered on **book of the month plan** at lowest price in Britannica History. Also Britannica Junior, the outstanding edition for children. Complete display at Annual Convention.
- H. G. Fisher & Company** **Space 17**
Chicago, Illinois
 Short Wave Units and Shockproof X-Ray Apparatus, latest models, will be on exhibit at

SEVENTY-TWO TECHNICAL EXHIBITS

the Fischer Booth. The Short Wave Units are worthy of special attention by physicians—affording every type of short wave application—cuff, pad, orificial, and inductance cable. Wave lengths are 6, 12, 18 and 24 meters. Fischer Shockproof X-Ray Apparatus, because of its compactness and all-service performance, in four special models, enables physicians to select equipment that exactly suits their needs. All convention visitors are cordially invited to see demonstrations.

General Electric X-Ray Corporation Space 53-54
Detroit, Michigan

A most cordial reception is awaiting friends and visitors at General Electric X-Ray Corporation's booths. The latest information concerning progress in the design of apparatus for x-ray diagnosis and high voltage therapy is available—also physical therapy. Those in attendance at our booth will be H. I. Nelson, Manager, C. S. Bierwagen, C. J. Haller, C. E. Moore, and L. B. Whalen.

Gerber Products Company Space 26
Fremont, Michigan

Gerber's Strained Foods for infant feeding and special diets will be on display. There will be charts and illustrations of the Shaker-cooker method of processing. Gerber's have two types of literature, some for distribution to patients and some for professional use only. Samples of the foods and the literature for examination, will be sent to registrants at the booth.

Hack Shoe Company Space 69
Detroit, Michigan

The Hack Shoe Company presents a complete line of "correct and corrective" footwear for men, women and children. Hack Shoes are designed primarily for the near normal feet, but include Clubfoot and other special shoes. Physicians are invited to visit this unique shoe establishment on the fifth floor of the Stroh Building.

Hanovia Chemical & Manufacturing Company Space 67
Newark, New Jersey

Our complete line of Ultraviolet, Sollux Radiant Heat Lamps and Short Wave Therapy Units, will be on display; well worth a few minutes of your valuable time, to witness a demonstration by a competent representative who will courteously extend a Greeting of Welcome.

The J. F. Hartz Co. Space 9
Detroit, Michigan

The J. F. Hartz Company, the long established physician's supply store at Detroit will have an interesting exhibit, displaying ampoules and pharmaceutical specialties manufactured in their own laboratory. This firm is doing an increasing business in this department. It has catered to the Medical Profession, Nurses and Hospitals for fifty years, in the supplying of equipment for the sick. The fitting of Trusses, Abdominal Belts, Stockings, etc., has always been done by employees who know how. The best for the sick and prompt service has always been a motto.

H. J. Heinz Company Space 31
Pittsburgh, Pennsylvania

H. J. Heinz Company invites you to visit their display of Tomato Juice, Breakfast Cereals, and Strained Foods, especially prepared for infant and convalescent feeding. Register for the second edition of their Nutritional Charts. This revised edition, published in December, 1935, contains, along with the vitamin, mineral and food composition charts, new sections on daily requirements and food allergy.

Horlick's Malted Milk Corporation Space 24
Racine, Wisconsin

The Horlick's Malted Milk Corporation will exhibit Horlick's the Original Malted Milk, in both natural and chocolate flavors, powder and tablet forms.

Among the special uses of Horlick's Malted Milk which will be featured are its advantages in the liquid diet, notably in cases of tuberculosis and other wasting diseases, during and after pneumonia, in gastric and duodenal ulcers and acidosis. Horlick's has also been proven by its results, for over fifty years, as a dependable food in infant feeding, even in difficult cases.

Hospital Liquids, Inc. Space 20
Chicago, Illinois

Intravenous Solutions in Filtrair Dispensers. All physicians should be interested in preparations and newer methods of administration of parenteral solutions. Interesting demonstrations of the Filtrair method will be on display at Booth No. 20. An attractive booklet on parenteral administration, reviewing all the literature to date, will be made available to physicians visiting the display of Hospital Liquids, Inc. Competent physicians will be in attendance at the booth and they will be glad to discuss the many problems of parenteral therapy.

The G. A. Ingram Company Space 81-82
Detroit, Michigan

The G. A. Ingram Company will show the latest approved Short Wave Unit at their booths during the September Michigan State Medical Meeting. It will be a combined unit, and all the better features will be incorporated; including, a twenty-five meter inductance cable; a fifteen meter condenser type outlet, and a sixty-five meter outlet for surgical work.

The Kellogg Company Space 1
Battle Creek, Michigan

Visit the Kellogg booth for a cup of refreshing Kaffee Hag Coffee. Bottle exhibits showing the stages in decaffeinating coffee are displayed and complete explanation of process is given. Reprints of reports covering research carried on at the University of Michigan to determine the affects of caffeine, are available. The exhibit is in charge of Mrs. Winifred B. Loggans of the Home Economics Department staff at Battle Creek.

Kellogg Corset Shop Space 7
Detroit, Michigan

Barbara Lymburner and Elsa Cooper of the Detroit Kellogg Shop will exhibit the Health Belts manufactured by the Kellogg Corset Company. Here exists a close cooperative plan between manufacturer and fitter which combines lower prices with better fitting service for conditions of Enteroptosis, Hernia, Sacro-Iliac Strain, Maternity, Obesity, etc.

A. Kuhlman and Company Space 3-4
Detroit, Michigan

A. Kuhlman and Company will exhibit new American Kny Scheerer head end controlled surgical table. The new American Luminaire, a new surgical light providing variable intensity. The new McIntosh line of short wave apparatus. The Filtrair line of Council accepted intravenous solutions and a selected line of surgical instruments and supplies.

Lea & Febiger Space 23
Philadelphia, Pennsylvania

Lea & Febiger will exhibit many new works and new editions of standard medical publications. Among the new titles are Davis' Neurological Surgery, Hawes and Stone on Tubercu-

VIEW THE EXHIBITS

- losis, Graham, Singer and Ballon on Surgical Diseases of the Chest, and Berglund and Medes on the Kidney. New editions are shown of Rhinehart's Roentgenographic Technique, DuBois' Basal Metabolism, Boyd's Pathology of Internal Diseases, Joslin's Treatment of Diabetes, Pemberton on Arthritis, Kovacs' Electrotherapy and Bridges' Dietetics.
- Lederle Laboratories, Inc.** Space 49
New York, N. Y.
Lederle Laboratories are featuring their Globulin Modified Antitoxins, especially those for Scarlet Fever, Diphtheria, Erysipelas and Tetanus at their booth at the Michigan State Medical Society Meeting. Other biologics shown—all, of course, accepted by the Committee on Chemistry and Pharmacy of the American Medical Association—are Antipneumococcal Sera together with the diagnostic Neufeld Typing Capillary Tubes; Staphylococcus Toxoid; Immune Globulin (measles modifier); Diphtheria Toxoid Alum Precipitated.
- Lepel High Frequency Laboratories, Inc.** Space 10
New York, N. Y.
Lepel High Frequency Laboratories will exhibit an ultra-short wave machine of 9m wave length and a short wave machine of 18m wave length, also a portable short wave machine of 12m wave length, all machines equipped with a circuit to energize our ultra-violet mercury quartz lamp which will also be on display. There will also be on exhibit the Leplex portable x-ray unit, a machine weighing only 39 pounds, which can be carried in a compact case to patient's homes and which sells for \$350.
- Libby, McNeill & Libby** Space 28
Chicago, Illinois
The most outstanding recent development in the science of infant feeding—Libby's Homogenized Foods. This new process mechanically ruptures the food cells of vegetables, fruits, and cereals, refines the cellulose tissue, releases the contained nutriment, and makes these foods more easy to digest and more completely assimilated. Photomicrographs of strained and homogenized foods graphically illustrate the advantages of the newer process. The Research Laboratories of Libby, McNeill & Libby invite you to inspect their display in Booth No. 28.
- The M & R Dietetic Laboratories, Inc.** Space 32
Columbus, Ohio
The M & R Dietetic Laboratories, Inc., will display Similac, a completely modified milk for infants deprived of breast feeding. Representatives will gladly explain the value of the zero curd tension as it applies to infant feeding; also the suggested application of Similac for special cases.
- Mead Johnson & Company** Space 68
Evansville, Indiana
A feature of the Mead Johnson exhibit will be a display of the Percomorph group of products; namely, Mead's Oleum Percomorphum, in liquid and in capsule form, and Mead's Cod Liver Oil Fortified with Percomorph Liver Oil.
- The Medical Bureau of Chicago** Space 48
Chicago, Illinois
M. Burneice Larson offers the facilities of The Medical Bureau, an organization acting as counselor in problems of medical personnel to physicians, hospital administrators, clinic managers and executives in the medical field. The records of physicians who have specialized in the various branches of medicine, men and women interested in assistantships, accredited graduate nurses, laboratory technicians and dietitians, are available to those interested in the completion or reorganization of their staffs.
- Medical Case History Bureau** Space 43
New York, N. Y.
If you are interested in a record keeping system that tells at a glance the case you want, how many calls you made and when, the patient's history, the developments, diagnosis and treatments, as well as the financial status of each case, it will pay you to investigate the Medical Case History Bureau in Booth 43.
- The Medical Protective Company** Space 80
Wheaton, Illinois
The most exacting requirements of adequate liability protection are those of the professional liability field. The Medical Protective Company, specialists in providing protection for professional men, invites you to confer, at their exhibit, with the representatives there. They are thoroughly trained in Professional Liability underwriting.
- The Mennen Company** Space 5
Newark, New Jersey
Be sure to register at the Mennen exhibit. Your registration entitles you to participate in the lucky number drawing for two DeLuxe Fitted Leather Travel Kits—which will be drawn for on the last day of the Convention. Mennen will exhibit their two baby products—Antiseptic Oil and Antiseptic Borated Powder, which have received such widespread acceptance and recognition by the medical profession and hospitals. Samples of these baby products, as well as The Mennen Company's shaving products for men, will be distributed.
- Merck & Co., Inc.** Space 47
Rahway, New Jersey
Cebione (pure crystalline vitamin C) is now available in convenient tablet form for oral administration, and also in ampuls of the pure crystals for patients requiring intravenous administration.
- Michigan Bandage Company** Space 33
Detroit, Michigan
Gauztex—a new style bandage that combines the qualities of ordinary bandage and adhesive tape, and eliminates the disadvantages of both. It is self-adherent but will not stick to skin or hair. It is easily applied, forms a neat dressing and requires no adhesive tape. It will not loosen in water, oil or grease; it stays on longer and requires less bandage per dressing.
- Middlewest Instrument Company** Space 79
Chicago, Illinois
Be sure to stop at Booth No. 79 when you are visiting the technical exhibits, and get a few very interesting and educational facts on the new Jones Motor Basal unit. It is Council accepted, guaranteed for life, contains no water, and embodies many exclusive features which will interest you.
- Philip Morris & Co. Ltd., Inc.** Space 70
New York, N. Y.
Philip Morris & Co. Ltd., Inc., will demonstrate the method by which it was found that Philip Morris cigarettes, in which diethylene glycol is used as the hygroscopic agent, are less irritating than ordinary cigarettes in which glycerine is employed.
- C. V. Mosby Company** Space 36
St. Louis, Missouri
The C. V. Mosby Company of St. Louis, will exhibit its complete line of medical publications. Among the 1936 releases on display will be—Sadler, "Theory and Practice of Psychiatry"; Hansel, "Allergy of the Nose and Paranasal Sinuses"; Herrmann, "Synopsis of Heart Dis-

VIEW THE EXHIBITS

eases"; Murray, "Examination of the Patient and Symptomatic Diagnosis"; Taussig, "Abortion—Spontaneous and Induced"; Bram, "Exophthalmic Goiter," and Bray, "Clinical Laboratory Methods."

Parke, Davis & Company Space 13, 14, 15, 16
Detroit, Michigan

A number of scientific accomplishments will be displayed by Parke, Davis & Company's staff of expert technical men in charge of Booths 13, 14, 15, and 16. Products of special interest to the medical profession will be shown, including Mapharsen (the new arsenical for antisyphilitic therapy), Meningococcus Antitoxin, hypnotics and sedatives included in the Ortol group, and several glandular products.

The Pelton & Crane Company Space 6
Detroit, Michigan

The Pelton & Crane Company, of Detroit, is showing a complete line of Pelton Sterilizers, including the attractive new "Tri-Plex" model, with built-in Instrument Sterilizer and Autoclave. Also on display are Pelton Cuspidors and Operating Lights, including the sensational new "Localite"—the no-heat, no-glare light for operative and diagnostic work.

Pet Milk Company Space 71-72
St. Louis, Missouri

Petrolagar Laboratories Space 65
Chicago, Illinois

Five types of Petrolagar are available for the specialized treatment of constipation. Each type serves a special purpose and enables the physician to fit the treatment to the particular need of the patient. Samples and further information may be obtained from Messrs. L. F. Harrison and R. J. Corkery at Booth No. 65.

Picker X-Ray Corporation Space 40-41
New York, N. Y.

Picker X-Ray Corporation will exhibit its new Series 93 complete x-ray apparatus—a condensed shockproof unit for fluoroscopy and Bucky radiography. This apparatus fills the needs not only as an auxiliary unit for the hospital or the roentgenologist, but as a general duty office unit as well.

Pocahontas Fuel Company, Inc. Space 39
Detroit, Michigan

A demonstration of Heating with Coal for Health's sake by the "O. P." completely Automatic Stoker. Dustless coal fed from bin to furnace thoroughly burned and ash completely removed to dust-proof cans with no clinker formation. This maintains circulation of air at even temperature, the two salient requirements of body comfort and health. Doctors, discuss your heating problems with our heating engineers.

Randolph Surgical Supply Company Space 11-12
Detroit, Michigan

The Randolph Surgical Supply Company will display a complete line of new equipment and medical furniture of modern design and new features to increase the efficiency of the physician's practice. Hamilton's new all-purpose examining table, also the latest development in short wave equipment by Liebel Flarsheim and other new equipment and instruments.

E. H. Rowley Company Space 83
Detroit, Michigan

E. H. Rowley Company, of Detroit and Grand Rapids, manufacturers and fitters of artificial legs and arms, will exhibit a complete line, using living models to demonstrate the salient features of limbs on display. Artificial legs for

above-knee and below-knee amputations will be shown, as well as arms for use after above-elbow and below-elbow amputations.

W. B. Sanders Company Space 50
Philadelphia, Pennsylvania

W. B. Saunders Company will have on display a complete line of their 250 titles. Of particular interest will be many new books and new editions including Wolf's "Endocrinology in Modern Practice," Berens' "Eye Diseases," Levine's "Clinical Heart Disease," New York Academy Fortnight Lectures on "Respiratory Diseases," Rehfuess and Nelson's "Medical Treatment of Gallbladder Disease," "Medical Clinics of North America," "Surgical Clinics of North America," Bickham's "Operative Surgery," Curtis' "Obstetrics and Gynecology," Christopher's new complete "Surgery," new edition of Christopher's Minor Surgery, new Mayo Clinic Volume, Hinman's "Urology," Jackson's Diseases of Air and Food Passages, and Cecil's Medicine, Eusterman and Balfour's "Stomach and Duodenum," and Thoma's "Oral Diagnosis and Treatment Planning."

Scientific Sugars Company Space 42
Indianapolis, Indiana

Cartose is a distinctive carbohydrate syrup made expressly for the physician's use. It is uniform, practically sterile, and contains no irritating impurities. Hixex is a high dextrin dextrin-maltose powder which provides a slowly digestible and not readily fermentable carbohydrate valuable for infant feeding and conditions of hyperemesis in pregnancy. Kinney's Vitamins are made for clinical use, and are not advertised to the laity.

S.M.A. Corporation Space 52
Cleveland, Ohio

S.M.A.—the antirachitic breast milk adaptation; Hypo-Allergic Whole Milk; as well as Carotene (Pro-Vitamin A) products, including real Carotene Crystals. Qualified technicians will be on hand to give appropriate information.

Sonotone Detroit Company Space 30
Detroit, Michigan

The Sonotone Hearing Aids will be displayed by the Sonotone Detroit Company with the Lansing and Grand Rapids dealers cooperating. The latest models of Dr. Lieber's bone and air conduction instruments will be shown, explained and demonstrated. Walter C. Bieneman, Detroit Manager, will be in charge, assisted by W. E. McKechnie, Lansing, and F. M. Cooper, Grand Rapids.

Standard X-Ray Equipment Company Space 57
Detroit, Michigan

The Standard X-Ray Equipment Company, of Detroit, will exhibit some outstanding developments in the line of Shockproof X-Ray Equipment as produced by the Standard X-Ray Company, of Chicago. They cordially invite you to visit their booth, where Mr. R. C. Hanks will gladly demonstrate their apparatus.

Frederick Stearns & Company Space 45-46
Detroit, Michigan

Frederick Stearns & Company is exhibiting Neo-Synephrin Hydrochloride and Insulin. Neo-Synephrin Hydrochloride is an improved, synthetic vasoconstrictor possessing the advantages of low toxicity and stability. When it is applied to the nasal mucosa, stinging is negligible. Physicians interested in the newer forms of insulin or the more unusual uses of insulin will profit by a visit to the exhibit.

Taylor Instrument Companies Space 34-35
Rochester, New York

Tycos blood pressure instruments in all the new models will be on display at the booth of the Taylor Instrument Companies.

VIEW THE EXHIBITS

Learn about the 10-year guarantee which eliminates repair charges—also the liberal exchange plan whereby you can trade in your old instrument as part payment towards a new Tycos.

Treatment Regulator Corp.
Detroit, Michigan

Space 44

For Administering Elliott Treatment, the Elliott Treatment Regulator circulates a constant supply of hot water through anatomically-shaped Latex applicators. Applicators are evenly distensible and when inserted in orificial body cavity fill cavity entirely, radiating heat evenly and uniformly. Pressure and temperature are under physician's control so patient suffers no discomfort. Temperature of 130 degrees F. can be continuously maintained.

James Vernor Company
Detroit, Michigan

Space 56

Vernor's Ginger Ale needs no introduction in medical circles. Its manifold uses are familiar to dietitian and surgeon alike. The dry ice dispenser shown at Booth No. 56 at the M.S.M.S. Annual Convention and Exhibition with an appropriate display of Vernor products, is the latest development for party uses. This unit is designed to serve a cold, tangy glass of Vernor's with all the efficiency of a fountain. Our hostess will be pleased to arrange for this service with a neat booth or stand, as you may desire.

Western Electric Hearing Aid
Detroit, Michigan

Space 18

Latest developments of the famous Bell Telephone Laboratories, shown at booth No. 18, include the new "Western-Electric" electric Stethoscope for testing the heart and chest, new Audiometer for testing hearing and new Audiophones for the deafened. Mr. G. C. Coil, Graybar Electric Company, Chicago, and Mr. W. M. Peebles, Detroit, representative, are in charge.

COUNCILOR DISTRICTS

First District.—Wayne.

Second District.—Hillsdale, Ingham, Jackson, Eaton.

Third District.—Branch, Calhoun, St. Joseph.

Fourth District.—Allegan, Kalamazoo-Van Buren, Berrien, Cass.

Fifth District.—Barry, Ionia-Montcalm, Kent, Ottawa.

Sixth District.—Clinton, Genesee, Shiawassee.

Seventh District.—Huron, Lapeer, Sanilac, St. Clair.

Eighth District.—Gratiot-Isabelle-Clare, Midland, Saginaw, Tuscola.

Ninth District.—Grand Traverse-Leelanau-Benzie, Manistee, Wexford (Wexford, Kalkaska, Missaukee).

Tenth District.—Bay-Arenac-Gladwin-Iosco, O. M. C. O. R. O. (Otsego, Montmorency, Crawford, Oscoda, Roscommon and Ogemaw combined).

Eleventh District.—Mason, Mecosta-Osceola, Muskegon, Oceana, Nawaygo, Lake.

Twelfth District.—Chippewa-Mackinac, Delta, Luce, Marquette-Alger, Schoolcraft.

Thirteenth District.—Alpena-Alcona, Presque Isle, Northern Michigan (including Antrim, Charlevoix, Cheboygan, Emmet).

Fourteenth District.—Livingston, Lenawee, Monroe, Washtenaw.

Fifteenth District.—Macomb, Oakland.

Sixteenth District.—Wayne.

Seventeenth District.—Dickinson-Iron, Gogebic, Houghton-Baraga - Keweenaw, Menominee, Ontonagon.

**HOUSE OF DELEGATES, MICHIGAN
STATE MEDICAL SOCIETY, 1936**

Names of alternates appear in italics.

Allegan

W. C. Medill, Plainwell
E. T. Brunson, Ganges

Alpena-Alcona-Presque Isle

F. J. O'Donnell, Alpena
D. A. Cameron, Alpena

Barry

R. B. Harkness, Hastings
H. S. Wedel, Freeport

Bay-Arenac-Iosco-Gladwin

L. Fernald Foster, Bay City
C. S. Tarter, Bay City

Berrien

R. S. Snowden, Buchanan
D. Richmond, St. Joseph

Branch

R. L. Wade, Coldwater
Samuel Schultz, Coldwater

Calhoun

Harvey Hansen, Battle Creek
A. T. Hafford, Albion
Wm. M. Dugan, Battle Creek
N. H. Amos, Battle Creek

Cass

W. C. McCutcheon, Cassopolis
E. M. Cunningham, Cassopolis

Chippewa-Mackinac

J. G. Blain, Sault Ste. Marie
F. Wendell Tamblin, Sault Ste. Marie

Clinton

Dean W. Hart, St. Johns
F. D. Richards, DeWitt

Delta

J. J. Walch, Escanaba
No alternate named

Dickinson-Iron

E. M. Libby, Iron River
W. H. Huron, Iron Mountain

Eaton

A. G. Sheets, Eaton Rapids
P. Engle, Olivet

Genesee

F. E. Reeder, Flint
George Curry, Flint
Donald R. Brasie, Flint
R. S. Halligan, Flint
D. R. Wright, Flint

Gogebic

W. E. Tew, Bessemer
W. L. Maccani, Ironwood

Grand Traverse-Leelanau-Benzie

E. F. Sladek, Traverse City
No alternate named

Gratiot-Isabella-Clare

Wm. E. Barstow, St. Louis
M. G. Becker, Edmore

Hillsdale

O. G. McFarland, North Adams
A. W. Strom, Hillsdale

Houghton-Baraga-Keweenaw

Geo. C. Stewart, Hancock
G. M. Waldie, Hancock

Huron-Sanilac

D. D. McNaughton, Argyle
J. C. Webster, Marlette

Ingham

L. G. Christian, Lansing
Harold W. Wiley, Lansing
C. F. DeVries, Lansing
O. M. Randall, Lansing
R. Wadley, Lansing
R. L. Finch, Lansing

Ionia-Montcalm

F. H. Ferguson, Carson City
Wm. L. Bird, Greenville

Jackson

Philip A. Riley, Jackson
James J. O'Meara, Jackson
Horatio A. Brown, Jackson
Corwin S. Clarke, Jackson

Kalamazoo-VanBuren

F. T. Andrews, Kalamazoo
R. G. Cook, Kalamazoo
Chas. TenHouten, Paw Paw
F. M. Boothby, Lawrence
H. H. Stryker, Kalamazoo
W. R. Vaughan, Plainwell

Kent

B. R. Corbus, Grand Rapids
Leon Sevey, Grand Rapids
Wm. R. Torgerson, Grand Rapids
A. V. Wenger, Grand Rapids
Carl F. Snapp, Grand Rapids
J. D. Brook, Grand Rapids
R. R. Smith, Grand Rapids
D. Hagerman, Grand Rapids
G. H. Southwick, Grand Rapids
Paul Kniskern, Grand Rapids

Lapeer

D. J. O'Brien, Lapeer
H. M. Best, Lapeer

Lenawee

A. W. Chase, Adrian
G. C. Hall, Adrian

Livingston

H. G. Huntington, Howell
J. J. Hendren, Fowlerville

Luce

R. E. Spinks, Newberry
A. T. Rehn, Newberry

Macomb

A. B. Bower, Armada
J. N. Scher, Mt. Clemens

Manistee

K. M. Bryan, Manistee
L. A. Lewis, Manistee

Marquette-Alger

V. Vandeventer, Ishpeming
R. A. Burke, Palmer

Mason

Lars W. Switzer, Ludington
No alternate named

Mecosta-Osceola

Geo. W. Yeo, Big Rapids
Jacob Bruggema, Evart

Menominee

Edward Sawbridge, Stephenson
No alternate named

Midland

David Littlejohn, Midland
J. H. Sherk, Midland

Monroe

Dean Denman, Monroe
J. H. McMillin, Monroe

Muskegon

Roy H. Holmes, Muskegon
Leland E. Holly, Muskegon

Newaygo

O. D. Stryker, Fremont
W. H. Barnum, Fremont

Northern Michigan

Guy C. Conkle, Boyne City
No alternate named

Oakland

Otto Beck, Birmingham
Ernest Bauer, Hazel Park
A. V. Muriha, Pontiac
Robert Baker, Pontiac

Oceana

W. Lemke, Shelby
Clinton Day, Hart

O. M. C. O. R. O.

C. R. Keyport, Grayling
C. G. Clippert, Grayling

Ontonagon

E. J. Evans, Ontonagon
J. L. Bender, Mass

Ottawa

E. A. Stickley, Coopersville
W. C. Kools, Holland

Saginaw

Ralph Jiroch, Saginaw
C. E. Toshach, Saginaw
L. C. Harvie, Saginaw
O. W. Lohr, Saginaw

St. Clair

A. L. Callery, Port Huron
T. E. DeGurse, Marine City

St. Joseph

R. A. Springer, Centerville
D. C. Weir, Three Rivers

Schoolcraft

Gail Broberg, Manistique
A. R. Tucker, Manistique

Shiawassee

I. W. Greene, Owosso
W. E. Ward, Owosso

Tuscola

O. G. Johnson, Mayville
A. S. Rundell, Vassar

Washtenaw

John Sundwall, Ann Arbor
Dean W. Myers, Ann Arbor
John Wessinger, Ann Arbor
S. L. LaFever, Ann Arbor
H. B. Britton, Ypsilanti
Warren E. Forsythe, Ann Arbor

Wayne (All delegates from Detroit except otherwise indicated)

R. C. Jamieson, T. K. Gruber of Eloise, J. M. Robb, Ralph H. Pino, L. J. Hirschman, Fred H. Cole, Jos. H. Andries, H. A. Luce, W. D. Barrett, Wm. J. Cassidy, Wm. J. Stapleton, F. B. Burke, Wm. R. Clinton, Douglas Donald, A. E. Catherwood, A. P. Biddle, S. W. Insley, Harry F. Dibble, Angus McLean, Chas. R. Kennedy, John L. Chester, E. D. Spalding, C. F. Brunk, Frank A. Kelly, H. W. Plaggemeyer, H. W. Yates, Chas. E. Dutchess, David I. Sugar, A. W. Blain, P. L. Ledwidge, C. K. Hasley, A. F. Jennings, W. S. Revero.
L. J. Gariepy, H. P. Cushman, B. U. Estabrook, C. E. Umphrey, M. H. Hoffmann, C. R. Davis, Wm. Honor of Wyandotte, L. T. Henderson, J. A. Hookey, B. L. Connolly, J. A. Kaspar, L. O. Geib, S. E. Gould, F. C. Kidner, S. A. Flaherty, E. R. Witwer, H. J. Kullman, C. R. Simpson, E. G. Krieg, H. W. Peirce, F. W. Hartman, R. B. Walker, Mark McQuiggan, W. N. Braley, Allan W. McDonald, Frank J. Kilroy, Wm. P. Woodworth.

Wexford

W. Joe Smith, Cadillac
J. F. Carrow, Marion

LOCAL COMMITTEES ON ARRANGEMENTS

General Chairman: Dr. T. K. Gruber

President of the Wayne County Medical Society

Committee on Hotels

Harry F. Dibble,
Chairman
Volney Butler
W. C. Lawrence

F. T. Munson
A. H. Price
C. K. Valade
R. V. Walker

Entertainment Committee

M. H. Hoffmann,
Chairman
H. G. Bevington
B. L. Connelly

J. W. Becker
E. W. Fitzgerald
Frank M. MacKenzie

Committee on Reception and Information

C. E. Lemmon
Chairman
J. R. Boland
R. H. Bookmyer
Douglas Donald
Howard Hanna
S. W. Inslay

J. D. Mabley
W. D. Mayer
Kenneth McColl
C. S. Ratigan
O. W. Pickard
Lynn F. Webber
Wm. P. Woodworth

Committee on Guests and Speakers

W. B. Cooksey,
Chairman
J. H. Andries
Wm. J. Cassidy

C. K. Hasley
H. A. Luce
Wm. S. Reveno
D. I. Sugar

Clinic Monitors Committee

E. R. Witwer,
Chairman
F. B. Burke
Don A. Cohoe
C. A. Christensen
Paul DuBois
R. L. Fisher
Thos. N. Horan

M. W. Jocz
Paul Lippold
R. C. Lockwood
J. B. Rieger
Saul Rosenzweig
L. W. Shaffer
Nelson Taylor
C. E. Umphrey

Committee on Autos and Parking

L. J. Garipey,
Chairman
L. M. Bush
B. L. Connelly

E. P. Mills
R. R. Piper
Gerald A. Wilson

Golf Committee

C. D. Brooks,
Chairman
Donald V. Clark
R. C. Leacock

L. J. Morand
L. S. Potter
Walter Wilson

Finance Committee

A. R. Hackett,
Chairman

W. H. Gordon
Herman D. Scarney

Committee on Publicity

Wm. J. Stapleton, Jr.
Chairman
S. E. Barnett
J. H. Dempster

A. E. Gehrke
R. W. Hughes
C. S. Kennedy
George C. Leckie

Committee on Exhibits

S. E. Gould,
Chairman
A. O. Brown

Stanley H. Brown
H. G. Palmer

WOMAN'S AUXILIARY

Mrs. Roger V. Walker,
Gen'l Chairman
Mrs. H. W. Plaggmeyer,
Entertainment
Mrs. A. O. Brown,
Transportation

Mrs. F. W. Hartman,
Publicity
Mrs. M. D. Vokes,
Hobby
Mrs. H. A. Freund,
Registration

REPORT OF LEGISLATIVE COMMITTEE

The Legislative Committee of the Michigan State Medical Society respectfully submits the following annual report to the House of Delegates:

An enlarged Legislative Committee of seven men held monthly meetings since last November. Attendance was good. Our President, President-elect, Chairman of The Council, Editor of THE JOURNAL, the Secretary and Executive Secretary, also other officers and members gave valuable time and advice to this Committee. Nine meetings were held and an honest attempt was made to carry out the recommendations of the 1935 House of Delegates and the preceding legislative Committee.

The Committee believes it has developed definite plans for an integrated program with a uniform legislative policy throughout the state. The main-spring of this activity is contact with office seekers before and after election, as experience seems to prove the wisdom of talking to legislators and other public officials before election. This work can be done most efficiently and only by the county medical society, made up of the friends and acquaintances of the office seeker. These keymen, members of the county public relations committee (or legislative committee), can secure information and the candidate's opinions in a quiet way, without antagonizing him, and forward same to the Executive Office of the M.S.M.S. for the permanent files and spot maps. To aid in this work, your Legislative Committee and Public Relations Committee have developed a questionnaire, in order to insure uniformity in our records at Lansing. The medical profession must gain the confidence of legislators and other office holders by proving to them that our motive is protection of the public health and our actions are always for the betterment of medical care. This is the message that the keymen in all counties must instill.

Your Committee discussed needed legislation, including a basic science bill, necessary revision in the Medical Practice Act, a bill to curb unauthorized practice of medicine, a model bill covering efficient administration of the afflicted persons' laws, a barbituric acid bill, and the question of integration of medicine, but at an early date, it decided that the basic science bill should be the chief legislative objective of the M.S.M.S. for the forthcoming legislative session. In Fact, your Committee felt it was far more important to work for the adoption of such a law than to start legal suit at this time against cultists who may be practicing medicine illegally.

The Legislative Committee approved the use of periodic legislative bulletins, sent out from the Executive Office, to advise appropriate committees of county medical societies regarding the situation in legislative activity. During the year, it answered numerous inquiries from county medical societies and individual members, and also studied and decided certain legal and ethical problems. In conjunction with the Public Relations Committee, it developed the Legislative Exhibit at the Annual Meeting of the M.S.M.S. which we recommend to the attention of all members.

Recommendations

The Legislative Committee, after a year of study, respectfully submits the following recommendations for the consideration of the House of Delegates:

1. Instruct every county medical society to appoint an *active* committee (public relations com-

mittee or legislative committee) to follow through on intensive legislative activity integrated by the Public Relations Committee for the State Society's Legislative Committee, and urge that the program be sustained.

2. Urge the importance of county medical society members identifying themselves with candidates for public office so they know who helped them in their election. It is the responsibility of the county medical society and its members to see that well-informed legislators and other public officials are elected. The Public Relations Committee is willing to integrate legislative activity in every county, but eventual success or failure of a state legislative program, no matter how good, depends upon intensive, enthusiastic and persistent efforts by the county unit.

3. Request county medical societies to quietly obtain information on candidates and supply same immediately upon request to the Executive Office of the M.S.M.S.:

4. Recommend that county medical societies become more interested in the proposed recodification of the state welfare laws and the afflicted persons' laws, as the subject concerns the property rights of every practitioner of medicine in this state.

5. Instruct that more publicity be given the activities, aims and purposes of the Michigan State Medical Society. A very active Bureau of Information of the M.S.M.S., plus speakers bureaus in every county medical society, must bring correct information on medical legislation to the public and the press.

6. Approve the principle that, while the medical profession should work out its own program so far as its own problems are concerned, it should work with the other professions of law, dentistry, nursing, education, whenever possible, on all matters that are for the good of the people, especially in view of the implications of the Social Security Act.

7. Instruct that all legislation desired by the Michigan State Medical Society to be presented to the Michigan Legislative Council for introduction into the Legislature.

8. Suggest to the Woman's Auxiliary and to the Michigan Branch of the Medical Women's National Association that they become increasingly interested in the legislative and sociological activities of all women's clubs and like organizations.

Dr. Fred Burke of Detroit will present to the House of Delegates a detailed report concerning the unauthorized practice of medicine.

Dr. J. E. McIntyre will discuss proposed changes in The Medical Practice Act.

Respectfully submitted,

H. H. CUMMINGS, M.D., *Chairman*
F. B. BURKE, M.D.
L. G. CHRISTIAN, M.D.
HENRY COOK, M.D.
L. J. GARIPEY, M.D.
H. E. PERRY, M.D.
C. F. SNAPP, M.D.

REPORT OF JOINT COMMITTEE ON PUBLIC HEALTH EDUCATION

Since January, 1935, the Joint Committee on Public Health Education, has held five meetings. The January, 1935, meeting had twenty-one members present, and the last meeting, May, 1936, had thirty-nine members present. The first three meetings were for the purpose, first, of investigating the advisability of engaging upon a program to coordinate the health education activities of the various health agencies in the State; and second, of financing a method for carrying out the program.

Funds were made available for the employment of a full-time field secretary, whose duties were to act as the liaison officer in bringing about a coordinated program in the field of health education in Michigan.

It will be recalled that the chief concern of the Joint Committee, since its inception by this Society in cooperation with the University of Michigan in 1921, has been to promote health education through lectures on medical and health subjects throughout the State. Through the formative years, to persons who were in close contact with the Joint Committee, it became increasingly apparent that a satisfactory means of coordinating programs of various units was essential for the best interests of all concerned in health education programs.

It is interesting to recall a portion of the report made to this body in the fall of 1923 by Dr. J. G. R. Manwaring, Chairman of the Advisory Committee on Public Health:

"Because of the troubled times of the present and the suspicions and difficulties physicians meet in their organized efforts, your committee recommends that the Michigan State Medical Society get into closer touch with other agencies interested in public health work. . . .

"Your committee recommends that an effort be made to form a central organization, directed by a board of managers under whatever name, made up of representatives from the organizations listed below.

"The duties of this organization will be to interest itself in the various public activities of the State, to assist in proper legislative action, to act as a medium through which these various activities can set themselves right with each other, to save duplication of effort, and to afford strong support when and where it is needed.

"Such an organization made up of laymen as well as physicians will have a standing and an influence which physicians alone cannot have, as no suspicion of selfish interest can attach itself to such a body.

"What units should comprise this organization will need further study, but as most of the work will be of an educational nature, educational units should be represented.

"Your committee tentatively suggests that the following organizations be represented in this program:

Michigan State Department of Health.
Michigan Tuberculosis Society (Trudeau Society).
Michigan Public Health Association.
Public School Commissioners Department.
Extension Department, University of Michigan.
Extension Department, Detroit College of Medicine.
Extension Department, Michigan Agricultural College.
American Red Cross.
Michigan State Nurses Association.
Michigan State Hospital Association.
Michigan State Newspaper Association.
Michigan State Dental Society.
Michigan Federation of Women's Clubs.
Michigan State Medical Society.

"It is further recommended that a Committee of Medical Relationships be appointed, whose chairman will represent the State Medical Society in the body above suggested."

The Joint Committee now consists of twenty-three organizations. Its membership includes all organizations suggested in the report just quoted. It will be readily recognized as we review the reorganized program of the Joint Committee, as inaugurated in September, 1935, that several suggestions of Dr. Manwaring's committee have been adopted.

At the special session of the Joint Committee in November, 1935, four standing committees and an executive committee were created. It was not expected that each of these committees would become active at once, but rather that the activities of each sub-committee would begin as soon as time and facilities would permit their successful operation.

Health Education in Schools

The first subcommittee to become active was the Committee on Health Education in Schools. The personnel of this Committee is:

Dr. Mabel E. Rugen, Chairman.....University of Michigan
Miss Alice Evans.....Children's Fund of Michigan
D. W. Gudakunst, M.D.....
.....Michigan Assn. of School Physicians
Dr. K. L. Heaton.....State Dept. of Public Instruction
Miss Otilia Frisch.....Michigan Education Association
Miss Ruth Freegard.....Michigan Home Economics Association
Miss Hazel Herringshaw, R.N.....
.....Michigan State Nurses Association
V. S. Blanchard.....Michigan Physical Education Assn.
W. R. Davis, D.D.S.....Michigan State Dental Society
Mrs. Lynn McNaughton.....
.....Woman's Organization for Non-Partisan Reform
Mr. Clare Gates.....Field Secretary, Joint Committee

This committee has held four all-day sessions and another meeting is scheduled to take place between the time of writing this report and its presentation.

The duties of this committee are to deal with problems of health in the school curriculum, the problem of health instruction to teachers in service and to teachers in training.

It should be noted that this subcommittee has been recognized by the State Department of Public Instruction as a contributing committee to the State Curriculum Study. Recommendations made by the committee and bulletins it prepares will be accepted and distributed by the State Department of Public Instruction.

The immediate concern of the committee is that a well-coordinated health instructional guide be prepared for use in schools. It requires very little observation to discover that there is an urgent and immediate need for the work this committee is doing.

It is unnecessary to comment on the high character and professional attainments of the several members of the committees.

Adult Health Education

The second subcommittee to become active was the Committee on Adult Health Education. The personnel of this committee is:

Miss Marjorie Delavan, Chairman....State Dept. of Health
Miss Mary Connolly.....Michigan Public Health Assn.
Dr. C. A. Fisher.....University of Michigan
Mr. Theo. J. Werle.....Michigan Tuberculosis Assn.
W. W. Gibson, D.D.S.....Michigan State Dental Society
Roy H. Holmes, M.D.....Michigan State Medical Society
Edna V. Smith.....Michigan State College
Louise Knapp, R.N.....Michigan State Nurses Assn.
Mrs. M. R. Keyworth.....Michigan Council on Adult Education
Mrs. Rachel G. Thompson.....
.....Woman's Organization for Non-Partisan Reform
Mr. Clare Gates.....Field Secretary, Joint Committee

At the initial meeting of the group it was agreed that an important method of developing a program would be through the collection of data on outstanding adult education programs. The suggested plan of work is an indirect rather than a direct approach, designed to function through professional workers and groups in the field.

The other two subcommittees, one on Scientific Programs, and the other on Administration, have not held meetings. The personnel of these committees is:

Scientific Program—B. W. Carey, M.D., Chairman; Wm. J. Stapleton, Jr., M.D., L. O. Geib, M.D., W. R. Davis, D.D.S., B. R. Corbus, M.D.
Administration—Dr. W. D. Henderson, Chairman; W. R. Davis, D.D.S., C. T. Ekelund, M.D.

The Executive Committee, consisting of the Chairman of the Joint Committee and the Chairmen of the four standing committees, meets at the occasion demands.

Radio Program

At the request of the Radio Committee of the State Medical Society, the Joint Committee, through its field secretary, made a survey of health programs given over radio stations in the State. This survey has been made and a report filed with the Radio Committee of the State Medical Society. The Field Secretary of the Joint Committee will continue to give assistance to the Radio Committee.

Cancer Program

A special grant of \$600 has been made to the Cancer Committee of the State Society at the request of Dr. O. A. Brines, the Chairman. This grant was made to aid in financing the excellent and comprehensive program of this committee. In addition to financial assistance to the Cancer Committee, the Joint Committee is assuming the responsibility of the distribution of its literature as well as the arrangement of the details for a state-wide lecture campaign contemplated in its program.

Health Education Program

The Joint Committee is continuing its program of promoting health and medical lectures. The emphasis, however, is placed on adult groups. A bulletin listing subjects approved and recommended by the appropriate committees in the State Society has been prepared and mailed to program chairmen of such organizations as the Parent-Teacher Associations, Women's Clubs, Granges, and so forth.

Conclusions

It is apparent from a review of the progress of the Joint Committee for the past year that after thirteen years the program has begun to approximate the far-reaching and sound suggestions made by Dr. Manwaring's committee in 1923. The intervening years have been rich in experience and the future seems promising for the gradual fulfillment of the early ideals of this organization.

Like the parts of a gigantic jig-saw puzzle, the different sections of public health education are beginning to take related positions. This is especially true of the different parts of the section on health education in schools and the section on adult education. At the same time, beginnings have been made in the more effective use of the radio and in assisting the expansion of a state-wide educational program on subjects of specific concern. And finally, a central bureau for providing speakers on health subjects in cooperation with the special committees of the professional groups is being continued. It may be said that during the year the major emphasis has been placed on a study of relative values, rather than quantitative activities, to determine the best methods of expanding and extending the Committee's activities.

REPORT OF THE COMMITTEE ON ECONOMICS

At the last meeting of the State Society at Sault Ste. Marie, this committee was authorized to continue the following subcommittees:

1. Survey of Relief Medicine.
(We are making a statement but not a final report on relief medicine at this time).
2. Post-graduate medicine for general practitioners, and in addition we were authorized to make a study of—
3. Industrial Medicine.
4. Group Hospitalization.

I.

SURVEY OF RELIEF MEDICINE

The sub-committee in charge of this phase of the program of the Economics Committee, with Dr. Insley as its chairman, has carried a heavy program this year. The final report of this committee will not be ready before the meeting of the State Society in September. Studies made by this committee cover three phases of medical care:

1. Care of the indigent.
2. Care of those needing supplementary medical relief.
3. Care of those in the low income group.

This committee hopes to be able to present a comprehensive plan for the care of the indigent to the House of Delegates at the September meeting. We are fully aware that no plan can be made available that will be perfect.

We wish to emphasize this, however, that some plan by the medical profession must be made for the following reasons:

1. The legislature meets in January.
2. Some form of relief medical legislation may be introduced by other groups.
3. Legislators who are not familiar with the facts of medical care must depend for guidance on some plan that will be submitted to them. That is the only way in which they can be guided in their deliberations.
4. If the medical profession gives them no positive guidance, that is logically set up and definite, they will be guided by plans from other sources.

Be sure that we will make no proposal that does not:

- (a) Adhere to the patient-physician relationship and to the freedom of choice of the physician by the patient except in so far as the physician may choose to send the indigent patient to a free clinic for indigent patients organized and conducted for teaching purposes and which does not also adhere
- (b) To the payment for medical care for the indigent on the same basis as for any of the other necessities of life.

We believe that such a procedure would place in the hands of younger men a source of practice and of income of benefit to the patient, the physician, and the County or State in the case of indigent patients and cost less than under present methods of salaried County physicians.

Your Committee comprehends that there are but two ways by which the indigent person can receive medical care:

- (1) By free care from private physicians.
- (2) By medical care provided by the County or State, or Private agency.

The medical profession cannot possibly provide

free medical care for all the indigent and should not be asked to. If, therefore, a more satisfactory arrangement can be made for all parties than now prevails, such planning should receive your consideration.

Supplemental Medical Relief and Care of the Lower Wage Group

(a) *The Low Wage Group.*

The sub-committee on relief medicine are giving this phase of medical relief a great deal of consideration. Both the chairman of relief medicine and of your Economics Committee have for nearly four years been active in the development and conduct of the Medical Service Bureau of the Wayne County Medical Society. This is a post-payment plan for those of low income that has been extensively copied in other cities. It is a plan consistent with the Medical tradition that the patient should have immediate care when needed, by the physician of his choice, and be allowed to pay for it as he can. It is a plan that places the recipient of medical care "on his own" and preserves his personal integrity. He pays to the extent of his ability to pay and no further.

(b) *Supplementary Relief Group.*

It would save much for the County and State to allow these people to pay on a post-payment plan. It would seem that the filter system inaugurated by the State Medical Society could provide the needed balance wheel in such a program.

Your sub-committee is studying ways and means of easing credit for these people. It requires much consideration.

Assuming that the following statistics are correct it immediately becomes apparent that the medical profession have always given people care in a very large part on post-payment basis and will so continue. Would it not seem that as far as possible other groups such as hospitals should give thoughtful consideration and coöperation in the development of ways and means of stabilizing this source of medical care?

These figures are from pre-depression reports.

Per Cent of Population	Income
.125	\$50,000 or over
.268	\$25,000 to \$50,000
1.08	10,000 to 25,000
3.58	5,000 to 10,000
8.92	3,000 to 5,000
7.154	2,000 to 3,000
35.37	1,500 to 2,000
22.76	1,000 to 1,500
13.93	500 to 1,000
6.78	500 and less
78.84	0 to \$166 per month

Your Committee on Public Relations is developing ways and means of providing post-payment facilities throughout the State in further answer to the call for more complete medical care in every county.

II.

POST-GRADUATE COURSES FOR GENERAL PRACTITIONERS

A. F. JENNINGS, sub-committee chairman

The sub-committee on Post-Graduate education has previously prepared and presented to this society a survey of existing facilities for post-graduate teaching (1934), an analysis of the results achieved in Michigan, as applied to the general practitioner, by the program put in effect under the

direction of the State Executive Committee on Post-Graduate Education (1935), and certain recommendations for the continuance of this work (1935).

In brief these recommendations embrace:

1. Utilization of all hospitals as centers of medical education.
2. A permanent faculty.
3. A regular curriculum.
4. An annual eight day course of study.
5. A certificate of attendance for each year of study.
6. A fellowship in Post-Graduate Medicine for attendance at five courses of study over a period of eight years.
7. An Honorary Fellowship in Post-Graduate Medicine for attendance at twelve courses of study over a period of twenty years.

It has been the aim of this work to transform every general practitioner from a potential to an actual student of the advances in Medicine. It has been repeatedly emphasized that the studies undertaken should be for the general practitioner and not for the training of specialists, the latter being adequately met by other agencies.

This Committee wishes to direct the attention of this Society to the results achieved by the State Executive Committee on Post-Graduate Education for the general practitioner, and recommends that the work be continued and expanded as experience indicates.

This Committee further recommends that the Michigan State Medical Society issue a certificate of attendance for each physician attending one course of Post-Graduate study, a certificate of Fellowship in Post-Graduate Medicine to each physician attending five such courses in eight years and a certificate of Honorary Fellowship to each physician attending twelve such courses in twenty years.

In addition to post-graduate teaching directed from the large educational centers, this Committee recognizes the tremendous potentiality for medical investigation, study and teaching interest to each and every hospital. A program to this effect has been reported by Dr. Ralph H. Pino at the annual conference of Secretaries of the State Medical Societies, Chicago, November 1935, and is in operation at Harper Hospital, Detroit. Under it certain members of the staff would be provided the opportunity to study designated diseases through observation of cases, review of the literature and analysis of personal experience. The knowledge so acquired could be made available to the profession through local clinics at teaching hours elsewhere in the State, or through the JOURNAL.

To this end this Committee recommends that certain hospitals removed from the large teaching centers also be requested to establish study centers, following the program of Dr. Pino, and that, if successful, the program be extended generally through the State.

This Committee recognizes the growing desire of many of the members of the profession to acquire a Master's degree in one of the special branches of medicine of a certification in a specialty. The Committee believes that a portion of the required work could well be done in selected localities where study centers have been established, and recommends that conferences to this end be held with the University of Michigan and the Wayne University.

This Committee further recommends that the various hospitals throughout the State be requested to take part in State-wide surveys in the investiga-

tion of certain diseases to the end that knowledge of them be disseminated and methods of treatment be unified.

III

INDUSTRIAL MEDICINE

At the annual meeting last year it was recommended that the Economics Committee be instructed to devote one year to the study of this subject.

We feel that our one year's study has been a fruitful one. Fruitful in our discovering that no Economics Committee made up of practicing physicians can do more than suggest possible methods of study. At our last meeting to consider this subject, held in conjunction with a similar committee of the Wayne County Medical Society, it was generally agreed that the Medical Society of the State could accomplish little of itself. That Committees would have to be named to contact Industry and Labor organizations, gathering their viewpoints and then attempting, in coöperation with them, to set up a program as nearly satisfactory to all concerned as possible. This we believe should be one phase of the program. It seems apparent that nothing less than a relatively expensive study conducted and financed possibly through the A. M. A. or the A. M. A. and State Societies combined, can be exhaustive enough to furnish adequate information. Such a commission might be named from influential medical men from industrial centers in various states. The detail work to be done by a competent, well paid executive secretary to the commission. The cost to be defrayed by the A. M. A. or by the A. M. A. in part, supplemented by assessments or contributions from the various State Medical Societies. A contribution of \$500.00 each from the 48 state societies matched by a similar sum from the A. M. A., or nearly \$50,000, might be sufficient for some definite conclusions to be reached over a period of two or three years.

If further deliberation warrants, prior to the annual meeting in September, a resolution will be drawn up and presented, advocating a study of this subject financed by the A. M. A. or by the State Societies and the A. M. A. combined.

When we consider the magnitude of the subject, coupled with the fact that we have only approximately \$500.00 to spend for our combined Economics Committee work, it becomes impossible for us to turn in a report on the subject of any importance as far as investigated facts are concerned. Some important phases of the subject include the following:

1. Occupational diseases.
2. Practice by corporations.
3. Industrial surgery.
4. Mutual insurance in Industry for medical care.
5. Practice of medicine by Hospitals relating to industry.
6. Workingmen's compensation.
7. Industrial practice in foreign countries.
8. Industrial eye hazards.
9. Irregular practitioners in industrial practice.
10. Contract practice.
11. Organized medicine and safety campaigns.

IV

GROUP HOSPITALIZATION

H. E. BECKER, Sub-committee Chairman.

It was recommended that we be prepared to report on this subject within sixty days. This we have found it impractical to do. To start with, authentic

reports from the Attorney General's office that new legislation will be required before group hospitalization can be undertaken in Michigan, were received.

Material has been gathered from many sources on this subject. We would emphasize the fact that Group Hospitalization is an experiment in the early stages, viewed from the standpoint of an insurance undertaking. If we are not mistaken, the oldest experiment of the kind in the United States under modern set-up is that of Baylor University Hospital at Dallas, Texas, organized in 1929. Since then many organizations have been developed, however, the majority within the past two years, so that the ratio of numbers enrolled in such organizations to duration of experience indicates a movement as yet without substantial experience when looked at from an actuarial standpoint. The argument by those who sponsor it seems logical. We must bear in mind, however, that the argument by the sponsors of Fraternal Insurance seemed logical, and millions of dollars were squandered in it until actual experience proved every tenet of fraternal insurance to be false in fact, though apparently sponsored by the best of intentions.

It is recommended by your Economic Committee that the Michigan State Medical Society take the attitude of watchful waiting while observing the results of Prepayment hospitalization in other states. That the Subcommittee handling this subject be continued, that it be prepared at all times to submit the latest data available on the subject to the Executive Committee of the Council.

Most of the available material on this subject seems to have been prepared by those promoting Group Hospitalization. It is recommended, therefore, that the Subcommittee be allowed a small fund for the purpose of keeping in touch with physicians in close contact with the plans in various cities in order to keep abreast of the experience of medical men in cities where it is being tried.

We do believe that we cannot ignore any honest effort put forth in good faith if the Physician-Patient relationship is preserved, if that effort would alleviate hospitalization needs to that group of 78 per cent of the population whose income ranges from nothing to \$166 per month, whether the plan is Prepayment or Postpayment.

However, we are aware of an analogous relationship existing between Prepayment hospitalization and health insurance. In view of this, your committee recommends a neutral attitude for the present but determined for all time to remain unalterably opposed to group hospitalization regardless of any other of its attributes if it does not preserve the Patient-Physician relationship, the free choice of physician, which government controlled health insurance does not do. This rule would seem adequate as a guide to any future action on this subject by the State Society.

We wish to call your attention to the fact that publications are extant, claiming that the Michigan State Medical Society has gone on record approving Group Hospitalization. Regardless of whatever step you may wish to take in this matter, we believe that the facts should be made clear in this respect.

We were asked to set up the arguments for and against Group Hospitalization. The Canadian Medical Association listed the following in their 1935 report:

Possible Advantages

1. It enables employed persons of average means to be assured of adequate hospital care at no other cost than a monthly payment which averages no more in many instances than the cost of a newspaper a day.
2. It enables them to obtain the scientific advantages of hospital services at an early stage of illness and thus avoids advance of illness to a degree where intensive hospitalization or medical care is required.
3. It avoids the necessity of the patient's going into debt or accepting charity service.
4. It enables him to retain his self-respect and saves him from the spectre of financial insecurity. (There is also distinct moral value in that it helps to prevent pauperization.)
5. It enables the hospital to place its financial structure on a more permanent basis.
6. It tends to increase occupancy of private accommodation (even though such be not included in the plan).
7. It yields an income (to the hospitals) in excess of the cost of care. (This applies to American plans.)
8. It enables the hospitals to admit to private accommodation many persons who otherwise would receive ward service (either by inclusion in the plan or by extending the privilege for a small additional sum).
9. It preserves the independent practice of medicine and enables the doctor to establish and maintain a private relationship between the patient and himself.
10. It enables the doctor to have the advantage of the hospital scientific facilities which otherwise might not be obtained because of the inability of the patient to pay for such service.
11. It enables the doctor to collect his fees more readily.
12. It also enables the doctor to retain many of his patients who otherwise might be lost to him, because of their inability to pay for private hospital service.
13. By lessening the financial burden of sickness to that group upon which it is the greatest hardship, group hospitalization plans remove or at least diminish one of the major factors behind the demand on the part of a large portion of the public for the inauguration of "State Medicine." Group Hospitalization should be looked upon as an antidote to, rather than a precursor of, more radical forms of socialized medicine.
14. A well controlled plan should help to raise the standard of professional work in the hospitals concerned by admitting to the organization only those hospitals with a high standard of efficiency and control and by the requirements and recommendations of the subscribers.
15. The increased interest of the subscribers in the welfare of their hospitals and in health problems generally, should be of mutual benefit to both parties.
16. By reducing hospital deficits, fewer and smaller requests for assistance will have to be made to municipal funds, to community chests or other sources of charitable funds.
17. A major share of the financial support of public general hospitals would still be provided by the public rather than the State, thus reducing the possibility, albeit a remote one, of political control of our institutions.
18. One hospital administrator comments on the relief of not having continually to send bills for hospitalization.
19. Experience has proved that many patients who could not pay a hospital bill in the ordinary way have little, if any, difficulty in paying small amounts periodically. Also, many of those who might be expected, under ordinary circumstances, to object to paying hospital indebtedness have been found quite willing to pay on the periodic basis.

Possible Disadvantages

1. Many plans are initiated without adequate provision to set up reserves, to minimize operating expenses and profit, to keep the rates actuarially sound, or to insure protection of and control by the subscribers and the hospitals.
2. Should the rate be too low or the hospitalization be heavy, the hospitals participating would lose financially.
3. If all public hospitals in a community are not members, the normal clientele of other hospitals may be affected.
4. It is not sound to have a commercial organization, interested primarily in profits, intervene between hospital and patient.
5. A voluntary plan is comparatively costly because of the greater willingness of the physically weak to participate.
6. If the hospitals are paid so much per patient-day from a common fund this fund might be depleted by undue retention of subscriber-patients.

7. Hospitals cannot guarantee accommodation in case of epidemic or major catastrophe.

8. Patients not requiring hospital care might insist upon being admitted.

9. Subscribers, not having to pay, would remain in hospitals longer than necessary. This, with the likely increased patronage, would overcrowd the hospital and force additional construction.

10. Unless participating hospitals extend their facilities to all doctors, there would be interference with the free choice of physician by the patient.

11. The influence of lay commercial interests may become so extensive that they may dictate to the members of the medical profession the basis of their relations to their patients and possibly limit the choice of medical attendant.

12. The plan is inadequate, inasmuch as other sickness costs are not included, nor do the plans provide in some instances for the dependents.

13. Group Hospitalization is but a precursor of general health insurance or even state medicine.

14. Hospitals are created to treat the sick and it is held by some that hospitals should not engage in developing financial plans for the public.

INSURANCE EXAMINATIONS

The sub-committee on Insurance Examination fees with Dr. Roy H. Holmes of Muskegon as chairman will report at the annual meeting regarding an educational campaign through the JOURNAL and otherwise to stabilize, by a more general understanding and definite procedure, the matter of Insurance Examinations, the present modes of which are contrary to the best interests of all concerned.

* * *

If your Economics Committee interprets the attitude of the medical profession of Michigan properly, it is to the effect that Michigan doctors of Medicine recognize the principle that a man possesses only in so far as he shares.

That if we are to keep our present economic system, it will have to be so managed as to share with all the security of health and a decent livelihood with doors open for personal and family fulfillment. Without this, no business or profession can hope to preserve its status quo in its methods and in its relationship to the people. The seemingly ultra-conservative tradition of medicine is in reality the tradition of sharing. In the protection of this principle we are unalterably against any system of government planning that interjects a third party, be it government or otherwise, between the physician and the patient. We know that that relationship is interfered with by every type of foreign government-controlled practice in existence, and we shall not knowingly be drawn into it.

F. A. BAKER, Pontiac
H. D. BECKER, Battle Creek
E. I. CARR, Lansing
S. W. INSLEY, Detroit
W. H. MARSHALL, Flint
G. A. SEYBOLD, Jackson
FERRIS SMITH, Grand Rapids

(Signed) RALPH H. PINO, *Chairman*, Detroit

NOTE—The Chairman of this committee has attempted to cause this report to meet with the ideas of the various members from their comments on the original report. Two members have not been heard from. Further changes may be made at a meeting of the committee prior to the annual meeting of the House of Delegates.

REPORT OF CANCER COMMITTEE

The Cancer Committee has held several meetings during the past year and has attempted to formulate a workable plan of lay cancer education.

About a year ago, in the summer and fall of 1935, a series of twenty-six cancer articles prepared by the Cancer Committee appeared in a high percentage of over four hundred newspapers throughout the state. The preparation and mailing of these newspaper releases was paid for by an appropriation in the 1935 budget of the society. Early this spring the *Detroit News* ran a series of similar articles of column length on five successive days.

It is the intention of the committee to inaugurate a program of cancer education, beginning after the next annual meeting of the Society, throughout both the lower and upper peninsulas. For this purpose a sub-committee has been appointed to cover the entire state, whose function it shall be to conduct a series of cancer lectures in their respective communities. The pioneering work along this line was done by Dr. VandenBerg in and around Grand Rapids and he will organize this lecture program. To supplement these cancer talks, fifteen sets of lantern slides are being prepared and a minimum of 10,000 cancer booklets, containing essentially the newspaper articles, are being printed. Financial assistance for this activity has been secured from the Joint Committee on Public Health Education through its chairman, Dr. James D. Bruce, to supplement the \$300.00 appropriated by the Council for 1936.

The Cancer Committee has allied itself rather intimately with the Joint Committee because, in the first place, both committees have common aims and secondly, because the Joint Committee is in a position to provide facilities for organizing and executing the program of the Cancer Committee in a very efficient manner.

The immediate concern of the Cancer Committee is education of the public but it has not forgotten the possibilities and necessity of postgraduate medical education along similar lines.

The next meeting of the Committee and Sub-committee will be in Detroit during September at the time of the meeting of the State Society. Another separate meeting of the upper peninsular members is planned to be held in Marquette on October 20.

Cancer Committee

(Signed) O. A. BRINES, *Chairman*.

REPORT OF THE COMMITTEE ON PREVENTIVE MEDICINE

The Committee on Preventive Medicine respectfully submits the following report for 1935-36:

This Committee held three meetings during the past year: On December 9, 1935, at the Hotel Olds, Lansing, Michigan; on April 1, 1936, at the offices of the Michigan Department of Health; and on June 10, 1936, at the Statler Hotel in Detroit.

Various activities have been considered, namely,

A. Bureau of Child Health and Maternal Welfare of the State Health Department

This Bureau has had allotted to it funds from the Federal Government under the Social Security Act. The cooperation of the State Medical Society was asked in advancing a program in the various counties, and the plans were approved with the

proviso that, "When a plan is being developed in a county, an advisory committee of three members of the County Medical Society will first be formed to work with groups in the county in developing the program and to act as a clearing house of information to the organized groups."

B. County Health Units

The Preventive Medicine Committee has for the past several years gone on record as favoring the formation of County Health Units (not practising units), and wishes again to call the Society's attention to the advantages which may be obtained under such a plan. Also, to the fact that Federal funds are now available for such purposes.

C. Bureau of Tuberculosis

The State Health Department was urged jointly by the Michigan Tuberculosis Society and the Preventive Medicine Committee to form a bureau of tuberculosis. The outline which appears below is a part of last year's report of this Committee, and has been reprinted from the September, 1935, issue of this JOURNAL. It is believed that such a division would be of great value to the State Health Department, the general public, and the practising physician, and so that there would be no misunderstandings as to the functions of this bureau, the Preventive Medicine Committee deemed it wise to republish it:

1. Case Finding by

(a) Stimulating interest in diagnosis and case reporting by private physicians, by

1. Instruction—postgraduate in coöperation with the University.
2. Assistance in providing x-ray facilities.
3. Proper reimbursement of physicians for diagnosis and care of indigents.
4. Aid in placement for care.
5. Check-back on all reported cases for examination of contacts.

(b) Lay Education in Tuberculosis, by

Coöperation with existing organizations, such as the Michigan Tuberculosis Society, and the Preventive Medicine Committee of the State Medical Society.

2. Hospitalization, by

- (a) Insistence that counties properly assume financial burden of care of indigents.
- (b) Studying available facilities for care and supervising care, utilizing all available tuberculosis beds and using beds in general hospitals where proper facilities exist.
- (c) Recommending additional facilities where definitely needed.

3. After Care and Follow-up, by

Looking after proper placement of patient after hospital treatment is over by referring to proper medical care at home, and to proper rehabilitation assistance as far as can be provided in needful cases.

D. Red Cross First Aid

The Red Cross requested approval of the establishment of first-aid stations along main trunk lines. The Committee then passed the ensuing resolutions: "That the Preventive Medicine Committee endorse the principle of wide-spread instruction in first-aid work and that we commend the American Red Cross and other organizations for their efforts along this line, and that we recommend that the county medical societies improve existing facilities, that is, training of police officers and ambulance drivers and

the public in the first-aid treatment of the injured in traffic and other accidents.

E. County Society Meetings

The Committee suggests that at least one meeting a year of every county medical society be devoted to a program on Preventive Medicine (economic and scientific). This program could be jointly sponsored by the county preventive medicine committee with the state, county or local health department.

F. Regional Conferences

The recommendation of last year is repeated. "That one day of each Regional Conference be devoted to Preventive Medicine and Public Health."

Respectfully submitted,

DR. L. O. GEIB, *Chairman*, Detroit
 DR. A. L. CALLERY, Port Huron
 DR. R. B. HARKNESS, Hastings
 DR. SHATTUCK W. HARTWELL, Muskegon
 DR. ALFRED LABINE, Houghton
 DR. R. M. MCKEAN, Detroit
 DR. J. J. O'MEARA, Jackson
 DR. MILTON SHAW, Lansing

REPORT OF THE ADVISORY COMMITTEE ON POSTGRADUATE EDUCATION

The Committee held two meetings during the year, the first on March 3, at the Book Cadillac Hotel in Detroit, and the second on June 10, at the University Hospital in Ann Arbor. Attention is called to the complete report of the first meeting which was published on page 414, in the June issue of the JOURNAL. A brief summary of that meeting, including the attendance report which has been brought up to date, is as follows:

Grand Rapids	234
Flint	169
Battle Creek-Kalamazoo	197
Bay City	147
Traverse City-Manistee-Cadillac	75
Ann Arbor	136
Detroit	177
Summer School attendance in Ann Arbor	11

Grand Total Attendance.....1,146

The Committee concurred in the following:

(a) An eight-day program in five centers to be held on the day of the week allotted to each center during eight consecutive weeks this autumn.

(b) Coöperation with the Upper Peninsula Medical Society in its August meeting and a special two-day session in October at some central point in the Upper Peninsula.

(c) The program for each conference to be submitted to this Committee before adoption.

(d) The socio-economic phase of medical practice to be presented at one noon-day luncheon in each area during the regular series.

(e) That wider publicity be given to our postgraduate activities.

(f) That advice and assistance be given to hospital groups or medical society groups not already provided for in this program in the formulation of postgraduate activity by and among themselves.

(g) That some form of certification be available upon the completion of the extra-mural four year

program, or for equivalent attendance in the Ann Arbor and Detroit centers.

Meeting of June 10, 1936

Those present: Dr. James D. Bruce, Chairman, Ann Arbor; Dr. Henry Cook (as Chairman of the Council), Flint; Dr. C. T. Ekelund (as Secretary), Pontiac; Dr. James H. Dempster (as Editor), Detroit; Dr. A. P. Biddle (representing profession at large), Detroit; Dr. James E. Davis (representing profession at large), Detroit; Dr. Wm. H. Marshall (representing profession at large), Flint; Dr. C. C. Slemons (State Health Commissioner), Lansing.

Also: Dr. R. Raymond B. Allen (Dean of Wayne University School of Medicine), Detroit; Dr. H. H. Cummings (Assistant Director Department of Postgraduate Education), Ann Arbor; Dr. Herman H. Riecker (Assistant in Internal Medicine in Department of Postgraduate Medicine), Ann Arbor.

Absent: Dr. B. R. Corbus (representing profession at large), Grand Rapids; Dr. J. B. Jackson (representing profession at large), Kalamazoo; Dr. J. M. Robb (representing profession at large), Detroit.

The Chairman presented a tentative list of twenty-two subjects, or morning and afternoon programs for eleven days. After careful consideration, the following program tentatively was approved:

- | — 1 — | Morning | Afternoon |
|-------|---|---|
| — 1 — | Clinical Pathological Conference. Clinical Course and Pathology of Circulatory Disease. Two Illustrative Cases. | The Differential Diagnosis and Management of Coronary Disease. Progressive Coronary Occlusion. Angina Pectoris. |
| — 2 — | Malposition of the Uterus. The Importance of Clinical Manifestations. Diagnosis and Treatment. | Management of Post-partum Infection. Diagnosis of Mild Cases. Course of the Infection. Prognosis, Prevention and Treatment. |
| — 3 — | The Common Psychoneuroses in Adults and Children. The Evaluation of History and Signs. The Manifestations in the Organs. Treatment. | Acute Lobar Pneumonia. A Discussion of Specific Methods of Treatment. A Consideration of Sera and Vaccine. Recognition of Complications. |
| — 4 — | a) Appendicitis. A Consideration of the Problems Involved in the Increasing Death Rate from This Disease.
b) Differential Diagnosis of Diseases of the Breast. | Care of the Injured Person, Including the Recognition and Emergency Care of Fractures. |
| — 5 — | The Place of the X-Ray in the Diagnosis of Gastro-Intestinal Disease. | Ulcerative Lesions of Gastro-Intestinal Tract. Esophagus. Peptic Ulcer. Ulcerative Colitis. Newer Methods of Treatment. |
| — 6 — | a) The Basis for Allergy in Man.
b) The Diagnostic Criteria of Allergic Diseases and a Consideration of the Practical Specific Management. | a) Allergic Diseases. Sensitization Dermatitis. Contact Dermatitis. Urticaria.
b) The Common Skin Manifestations of Allergy. The Skin in Immunity and Allergy. |
| — 7 — | Fungus and Allied Infections of Skin. Tinea Infections. Trichophytids. Tinea versicolor. Erythrasma. Blastomycosis. Coccidioid Granuloma, etc. | Urinary Tract Obstructions: Urethral, Prostatic, Bladder Lesions, Ureteral Lesions, Symptoms, Diagnosis and Management. |
| — 8 — | Recognition and Management of Acute and Chronic Disease of the Ear. | The Diagnosis and Practical Management of the more Common Diseases and Injuries of the Eye. The Conjunctiva. Squint. Foreign Bodies. Glaucoma. |

The Committee felt quite strongly that our program should be intimately associated with a hospital in each center, and, further, that it was desirable to have members of the Advisory Committee act as chairman of the local committees wherever possible. Thus, Dr. J. B. Jackson would automatically become chairman in Kalamazoo; Dr. B. R. Corbus in Grand Rapids; Dr. W. H. Marshall in Flint, and in other centers the councilor of the district or the secretary of the local county medical society.

The attendance record in Traverse City-Cadillac-Manistee area was given careful consideration. It was decided to continue the program through the autumn of 1936, with the thought of centralizing the activities in one center, or possibly selecting other centers for next year.

The Committee is very much gratified with the universal approval of the men who have attended the programs. However, it was pointed out that too large a proportion of our membership is still not availing itself of these opportunities which are brought practically within reach of everyone.

Notwithstanding that the entire membership has received one or more personal communications concerning the date and content of these programs and that space is generously accorded for notices in the JOURNAL, many doctors claim that they have been uninformed about the program. It was therefore decided that in addition to personal communications and notices in the JOURNAL, further publicity would be given through the daily papers of each center. This is to be in the form of a request to the people in the various teaching areas to refrain from calling their physician during the five-hour weekly period, except in an emergency, in which case he may be reached promptly at a specified hospital.

It was further recommended that all socio-economic problems of medical practice be omitted from these programs, and that the teaching schedule be confined entirely to the scientific phases of medical practice.

Dr. C. C. Slemons informed the Committee that when he explained the details of the Michigan Postgraduate Program to the U. S. Public Health Service he had little difficulty in getting an appropriation of \$1,500 towards its support. The U. S. Public Health Service is especially interested in venereal disease, preventive practices in children, and in obstetrical teaching. It would wish these, together with all phases of preventive medicine, especially stressed.

The Committee recommends that a certificate of attendance be issued at the end of the review period. It does not know whether the field of general practice may be adequately covered in four or in five years, but it will not be less than four nor more than five. Further, it recommends that non-members of the Society be accorded the privilege of attending the courses, but that they not be given certificates.

Examination of the attendance record of the first year's program shows that the peak was reached on the 8th day, decreasing markedly after that. For the present it was felt advisable to continue the eight-day program, as was done last year.

It is recommended that certification be on the basis of attendance upon at least five of the presentations.

It was further recommended that the composite course in general medicine, given annually in Detroit, in which the eight-day extra-mural program is reviewed, be accepted for credit in lieu of the eight-day out-state course; further, that a comparable amount of postgraduate attendance, either in other courses given under these auspices or outside the state, also be acceptable for certificates.

The plan of assembling the lecture outlines and their publication in book form has proved very popular. Many practitioners who have not received these texts but have seen them have expressed a desire to purchase them. It has not been possible to accede to these requests, for only a few copies more than the number of registrations were published. This publication has been made possible through the generosity of the W. K. Kellogg Foundation, and it is planned to issue a volume for each succeeding program. Thus, in the four- or five-year course a small working library may be assembled which covers quite completely the field of general practice of the period. In the opinion of the Committee the presentation of these volumes should be subject to the same regulations as the granting of certificates of attendance.

The question was raised as to the possibility of including Jackson and Lansing in the postgraduate program, and the secretary was instructed to communicate with the county medical societies of these districts, with the view of giving whatever assistance we could until such time as centers could be established, should this be acceptable to the local organizations. Dr. Earl I. Carr of Lansing and Dr. Cecil Corley of Jackson met with the Chairman of the Committee and the Councilor of the 14th District. After a careful review of the conveniences to the practitioners of these areas which the establishment of centers at Lansing and Jackson would afford over our present arrangements, the Chairman of the Committee suggests that a center be established this year in Jackson and Lansing jointly, and that Thursday of each week be assigned to them alternately.

The Committee was especially pleased to welcome Dr. Raymond B. Allen, Dean of Wayne University School of Medicine, to the meeting on June 10. Dean Allen entered importantly into the discussion and expressed the wish to be as useful as possible in this program which has his very full approval. The Committee appreciates this fine offer of co-operation and suggests that Dean Allen be invited to membership on the Committee; and, further, that the Wayne University School of Medicine be invited to participate officially in future programs.

Respectfully submitted,

JAMES D. BRUCE, M.D., *Chairman*
C. T. EKELUND, M.D., *Secretary*

of Obstetric practice have been investigated. The major work of the Committee for the year has been the planning, in conjunction with the United States Public Health Service, of a study of Obstetric practice as conducted in this state at the present time. Within a short time carefully prepared survey blanks will be submitted to physicians of the State who do Obstetrics. These blanks are so arranged that a study following their return should permit a significant evaluation of the quality of Obstetric practice.

So far as the Committee is informed no such study has been previously undertaken.

If the physicians throughout the State coöperate by carefully filling out these blanks and returning them promptly, information of great value should be obtained from them.

Another objective deals with the education of the public as to what constitutes efficient Obstetric care. The Committee has arranged for medical speakers to address lay groups on Maternal Health problems and already some addresses have been made. In this connection, a moving picture film on "Pre-natal Care" has been prepared under the supervision of the Committee, and this film will soon be released for presentation before lay audiences. The Committee also plans to prepare a moving picture film on Obstetrics for presentation before medical groups.

The Committee has investigated the lack of adequate clinical teaching material in Obstetrics at the University of Michigan Medical School and is deeply concerned over it. The Committee considers the situation to be serious and is unanimous in feeling that adequate and complete rectification should be made. To this end it is suggested that the Committee be authorized to work with Medical School officials in developing a plan for the augmentation of clinical material available for obstetrical teaching.

Close coöperation with the Department of Post Graduate Medicine and lay organizations has been attempted at all times. Because of a wide spread interest in contraception among the physicians of the State the Committee is striving to further disseminate information on this subject along ethical lines.

Enthusiasm and active interest has characterized all the Committee meetings. The Committee has had the coöperation of the President and the President-Elect of the Michigan Medical Society, the State Commissioner of Health, the Executive Committee of the Michigan State Medical Society, the University of Michigan, and the United States Public Health Service.

Respectfully, submitted,

ALEXANDER M. CAMPBELL, *Chairman*
HAROLD A. FURLONG
NORMAN F. MILLER
WARD F. SEELEY
HAROLD W. WILEY

REPORT OF COMMITTEE ON MATERNAL HEALTH

We hereby submit to your honorable body a report of the activities and recommendations of the Committee on Maternal Health, which was appointed by President Penberthy to serve during the current year.

The objective of this committee is to suggest improvements in the standards of Maternal Health throughout the state. To this end several major projects have been initiated and several other aspects

REPORT OF PUBLIC RELATIONS COMMITTEE

The Public Relations Committee herewith respectfully makes its first report to the House of Delegates. This committee was appointed to coöperate and integrate the individual activities of the other committees of the Michigan State Medical Society;

also to be an initiating force to set up and stimulate necessary programs of the state and county societies and make certain lay contacts. This committee has collected, selected and disseminated the plans and accomplishments of progressive county medical societies for emulation by other societies whose needs are similar.

The Public Relations Committee has held nine meetings since its creation last October, with excellent attendance. During this period, which included a winter of very inclement weather, the committee members have made personal appearances and have visited seventy-seven of the eighty-three counties of Michigan. In addition, this committee issued four letters to presidents, secretaries, and chairman of public relations committees of all county medical societies giving important information.

Integration was the prime function of this committee. The mechanics of its integration system are best illustrated by the accompanying diagram. (See page 60.)

Projects

During the year, important projects for integration were referred to the Public Relations Committee from the various committees of the State Society by The Council and its Executive Committee. Briefly, these projects were as follows:

1. *The Filter System* to aid governmental agencies in a more efficient administration of the crippled and afflicted children laws. This has proven so successful in the state, because of the coöperation and active support of county medical societies, that

some local governments are applying the principle to the administration of the afflicted adult law. This satisfaction is further exemplified by the Governor's Executive Order of June 4, 1936, making the Filter System official; this Executive Order necessitated the adoption of uniform blanks for the Economic and Medical Filter Committees of the state, previously recommended by the Public Relations Committee. The contacts and negotiations required in every county in the establishment of the Filter System have resulted in a better understanding between county medical societies and governmental officials—a health trend. County medical societies are urged not to relinquish control of the medical filter.

2. *Information on "Socialization of Medicine."*—This was accomplished in two ways:

(a) Distribution by the Executive Office of the Michigan State Medical Society of packages, each containing 21 booklets, to 991 high schools and colleges, 246 to libraries, 167 to miscellaneous individuals and groups upon request, a total of 29,484 pieces of excellent literature supplied at no cost to the Michigan State Medical Society by the American Medical Association.

(b) The brochure of the Michigan State Medical Society entitled "Who Wants Socialized or State Medicine?" Six thousand copies of this publication were printed for distribution to the profession and the public.

3. *Bureau of Information and Speakers Bureau.*—

(a) The Bureau of Information, a new activity of the Michigan State Medical Society created during the last few months, will supply the public and the 425 newspapers of Michigan with articles and stories developed in the Executive Office approved by the particular initiating committee and by The Council or its Executive Committee. These releases will give the medical viewpoint or bias and will be designed to combat anti-medical propaganda and to further higher standards of public health.

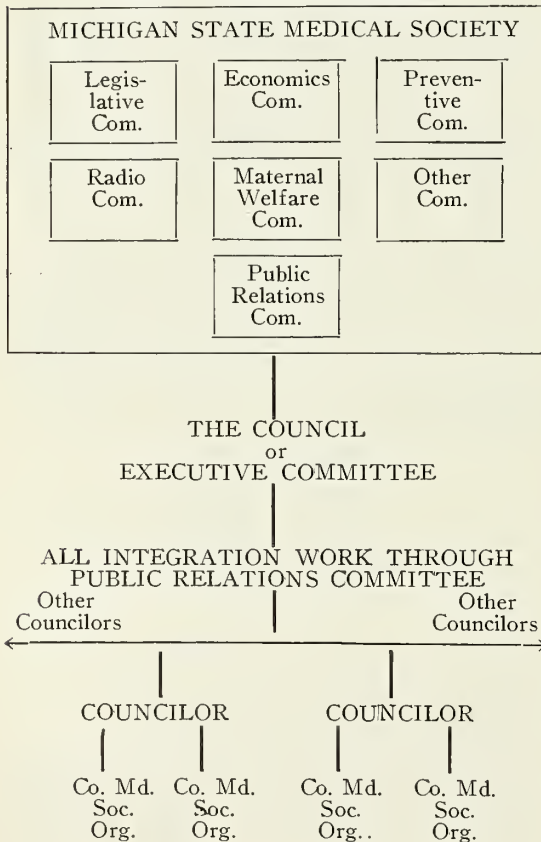
(b) The speakers bureau is designed to provide individual communities with adequately prepared medical speakers to appear before lay groups, such as the parent-teacher associations, service clubs, women's clubs and the like. The success of the speakers bureau will be the responsibility of the county medical society.

4. *Closer Physician-Public Contact.*—Closer contact with the public is absolutely necessary for the physician and for the public. Definite plans are being worked out to increase the influence of the medical profession with laymen of the state. Each county medical society should participate and be the mentor of every proposed medical plan or policy within its jurisdiction.

5. *Legislative Integration.*—This committee reiterates the great need for individual county medical society activity in the work of medical legislation, especially in 1937. The county society can make or break a good state legislative program! This is the duty and obligation of the county public relations committee (and legislative committee), and if the State Society's Public Relations Committee, charged with the work of integration, can be of any assistance, it is ready upon call.

6. *Distribution of Medical Care.*—This is a vital problem, and its solution especially with regard to the borderline group representing twenty per cent of

Diagram of Integration Program



medical practice must come from the medical profession or it will be attempted by outside and unfriendly groups of selfish individuals, with bad results to the profession and to the people. The Public Relations Committee encourages the principle of a postpayment plan for the borderline cases, to allow people in this group the opportunity independently to pay their own way. Faced with any emergency, the average American merely requires the privilege of time payments.

7. *Public Health Projects.*—

(a) *County Health Units*, as educational and administrative—not practicing units—were recommended by the Preventive Medicine Committee; the Public Relations Committee was requested to draft a list of regulations or conditions-precedent which county medical societies might present to proper authorities before they approved the installation of county health units. This was done and integrated through a Public Relations Committee letter.

(b) *Maternal and Child Health Work in Michigan under Social Security Act.*—Certain recommendations for this important activity in Michigan, which involves approximately \$89,000.00 per annum, were drafted and agreed to by the Michigan Department of Health. The program is being integrated in certain counties on the basis of this agreement.

(c) *Department of Tuberculosis in State Department of Health.*—Approximately \$4,500,000.00 is being spent annually in Michigan by government for the tuberculous, and an even greater amount is necessary to control and eventually reduce tuberculosis to a minimum. A tuberculosis division in the State Department of Health appears necessary, and the Public Relations Committee approves in principle the projected incorporation of such a tuberculosis control service, to be conducted with the coöperation of the Michigan State Department of Health, the Michigan Tuberculosis Association, the State Sanatorium Commission, the Preventive Medicine Committee and the Public Relations Committee of the Michigan State Medical Society, all allied agencies to urge the Legislature to provide adequate funds to carry on this work.

8. *Medical Supplement in Newspapers.*—This undertaking of certain county medical societies in other states has been productive of excellent results. A supplement or section of the city or county newspaper is devoted annually to the presentation of the history, progress, aims and purposes of Medicine and its organization. Such coöperation with the publishers in every community of this state—the men who mould public opinion—will be conducive of unbelievably good results for the individual practitioner, for the profession as a whole, and for the public.

9. *Radio Activity.*—The Radio Committee and the Joint Committee on Public Health Education have asked the Public Relations Committee to integrate medical programs over ten radio stations in Michigan. This project will require the very active work of medical societies and individual practitioners of medicine in the counties where radio stations exist. The educational force of the radio must be counted as a prime function in the program of the modern county and state medical society.

Allegiance to Medical Society

The work of the Public Relations Committee was varied in scope and generous in amount. It was accomplished only through extraordinary interest

and self-sacrificing coöperation on the part of the officers, members of The Council, and individual members of the Michigan State Medical Society. Hard work by the Executive Secretary and his office personnel materially aided this committee's work. The Public Relations Committee extends grateful thanks to all who helped.

"Organize the profession to think and to act" was the slogan given the members of this committee at its first meeting by President Grover C. Penberthy. We have worked with this in mind. We have learned that with unity in the profession, it can accomplish anything that is good for the people and for the profession. Primary allegiance to the county and to the state medical society is the keystone of success.

Recommendations

As a result of its experience during the past year, the Public Relations Committee respectfully submits the following recommendations for the consideration of the House of Delegates:

1. Continue the Public Relations Committee, and change its status to a standing committee by an amendment to the By-laws of the Michigan State Medical Society.

2. Inaugurate intensive legislative activity *at once* in every county medical society through its appropriate committee, and urge that the program be sustained, in the interest of self-preservation.

3. Encourage the immediate establishment of a Speakers Bureau by every county medical society to bring physicians into closer touch with organized groups.

4. Approve the development of plans by this committee for better physician-public contact.

5. Urge each county medical society promptly to study the Distribution of Medical Care, with special attention to the borderline group, bearing in mind the local conditions and peculiar needs of every county; the results of these studies should be submitted to the Michigan State Medical Society to crystalize and integrate throughout the state.

6. Foster greater interest on the part of every physician in the field of preventive medicine and in public health activity, especially in view of the implications of the Social Security Act.

7. Give impetus to the plan of an annual medical supplement in at least one newspaper in every county, the first edition to be projected at the earliest possible date.

8. Institute an official visit *annually* to each county medical society by one or more officers, councilors, and committeemen of the Michigan State Medical Society, such a meeting to be known as "Michigan State Society Night."

9. Authorize a study of councilor districts and county society jurisdictions, to determine whether more practical divisions should be made in the light of population changes and the ease of modern transportation.

10. Arouse the membership, through the county medical societies, to the fact that a definite trend on the part of the professional sociologists, politicians, corporations, and hospitals, is existent to

tear down the independence of the practice of practitioners of medicine.

Respectfully submitted,

L. FERNALD FOSTER, M.D., *Chairman*
F. T. ANDREWS, M.D.
E. I. CARR, M.D.
R. H. HOLMES, M.D.
F. B. MINER, M.D.
P. A. RILEY, M.D.
J. J. WALCH, M.D.
A. V. WENGER, M.D.

REPORT OF SPECIAL CONTACT COMMITTEE TO GOVERNMENTAL AGENCIES

The Special Contact Committee to Governmental Agencies, a new committee this year, has proven its value to the profession, to government, and to the public.

PROJECTS

1. Crippled-afflicted Child Laws.—The major project presented to this group was the afflicted-crippled child problem. This was so acute last October that the State officials invited the Michigan State Medical Society (its Executive Committee of the Council) and the Michigan Association of Probate Judges to find a solution. The Filter System was the outcome.

The question of procuring reasonable fees for medical and surgical services supplied to crippled and afflicted children, as provided by the two State laws, was referred to the Special Contact Committee. A subcommittee (Drs. Penberthy, Perry, Cook, Cummings, Foster and Insley) made a number of visits to the Capitol to confer with the Governor, with the Michigan Crippled Children Commission, and with the Finance Committee of the State Administrative Board, individually and collectively. Out of these discussions came the reinstatement of Schedules A, B, C, and D by the Crippled Children Commission, on March 17, 1936, the Governor's Executive Order of June 4, making the Filter System official and requiring as part of the application for tax-supported medical care an affidavit re economic status, and finally the approval of the fee schedules by the Governor and the State Administrative Board on July 21, 1936, effective as of July 1, 1936. All these negotiations were made with the continuous advice and consent of the Executive Committee of the Council.

The Public Relations Committee, meanwhile had integrated the Filter System in every one of the eighty-three counties, resulting in splendid contacts and fine coöperation between physicians, probate judges, and other county officials throughout the state—a healthful activity and an encouraging sign.

The medical profession now has a great responsibility in this matter. It recommended an experiment which is being tried. If it fails, all the hard and sustained work of your State Society will be for naught and the profession's ability and standing will be discredited. Every physician in the state must endeavor to keep the afflicted child load to a minimum consistent with proper medical care to the worthy who need it. Success or failure of this medical program depends upon the individual practitioner.

2. SERA Medical Care.—Your Committee discussed this subject and studied efforts of various county and state medical societies to devise plans to provide medical care to unemployed and employed on relief and WPA. A subcommittee (Drs. Penberthy, Cook, Ekelund, Foster and Gruber) contacted the SERA Administrator in Lansing on two occasions to discuss the essential features of certain successful programs already in operation, and to stress the necessity of a medical advisor to act as coöordinator of state-wide ERA medical activities.

3. WPA Medical Care.—In January, 1936, contact was made with the State WPA Director in Detroit for a discussion of two items: The system of examining WPA workers to ascertain ability to carry on prescribed work, and the question of supplemental medical care for WPA workers. The matter of physical examinations of WPA applicants was left entirely to the district director, and the Committee found that no federal funds were available for this medical work; also that the federal government did not provide supplemental care for those on WPA.

The Committee, therefore, advised that each physician in the state deal with each WPA worker as his private patient, making such financial arrangements as would seem justified. Only in this way will the patient-physician relationship be maintained and work to the advantage of the practitioner as these workers are absorbed in private industry. Your Committee recommended that no plan to care for WPA workers in a group or groups be accepted by a county medical society.

CONCLUSIONS

Your Special Contact Committee to Governmental Agencies feels that good ground work has been developed during the past year. Certain state and many county officials have a better knowledge of medical work and problems due to contacts made during this period. They realize a professional viewpoint in medical matters exists, and they now know where to seek it, and do seek it to help ease their own burdens. On the other hand, the medical profession—state-wide and on the part of the fifty-three county medical societies—has learned the importance of contacting governmental people and considering matters of mutual concern. The interests of the patient, our chief concern, are enhanced because of this necessary and important contact work.

RECOMMENDATIONS

Your Special Contact Committee to Governmental Agencies respectfully recommends to the House of Delegates of the Michigan State Medical Society:

1. That a "Governmental Contact Committee" be made a standing committee of the Michigan State Medical Society, and be composed of not more than five members (as a small unit is best suited for the particular work of this group) each to serve a three-year term with appointments staggered.

2. That every county medical society be encouraged to sustain and enlarge the important contact work already inaugurated and being done, so that officials of government may seek advice and guidance in medical matters from those who are technically trained and experienced to give it—the physicians, through their county medical society.

3. That the House of Delegates of the Michigan State Medical Society recommend to the SERA

that a medical advisor be employed to coördinate the ERA medical activities of the State, and that the Michigan State Medical Society offer its help to obtain the best doctor of medicine available for this work.

Respectfully submitted,

HENRY COOK, M.D., *Chairman*.
B. R. CORBUS, M.D.
H. H. CUMMINGS, M.D.
L. FERNALD FOSTER, M.D.
T. K. GRUBER, M.D.
C. R. KEYPORT, M.D.
GROVER C. PENBERTHY, M.D.
R. H. PINO, M.D.

REPORT OF THE COMMITTEE ON MENTAL HYGIENE

The Committee, at the outset, takes this opportunity to express its very deep regret with respect to the death of its first chairman, Dr. Albert M. Barrett, on April 2. This, naturally, was a serious loss to the Committee, depriving it of valuable leadership relative to the direction and organizing of its activities.

However, it has been possible for it to attain a certain orientation as to its work and, tentatively, to formulate objectives as to constructive function.

There is no question that need for greater and more adequate facilities for the hospitalization of patients suffering from mental disorders, is an extremely urgent and pressing one. This is a question, too, relative to which the medical profession has a definite and primary responsibility. Furthermore, in the solution of this problem it must, as a profession, vigorously and intelligently participate with other community groups and forces, if such solution is to be an effective and expedite one.

Likewise, the even larger importance of the extra-institutional aspect of psychiatry, that is the significance of psychological and emotional disturbances for the general practice of medicine, must be in greater degree appreciated by the profession, and in terms enabling adequate procedure and handling. Without such understanding, medical practice finds itself handicapped and unable to do justice to its fundamental responsibility, the optimal and complete treatment of the patient, and from the standpoint of all of his levels of function and expression, not merely the technically somatic.

The promotion of such understanding and interest along these lines, could be greatly facilitated by an adequate and practical educational program. In this connection, the Committee suggests enlistment of the resources of existing agencies, as the Department of Post Graduate Medical Education of the University of Michigan. Also indicated, would be arrangement for special lectures and discussions before various groups, medical and otherwise, and by radio. Here, the Committee feels there would be fruitful opportunity for coöperation with the Joint Committee on Education and the Radio Committee of the State Medical Society. In this relation, incidentally, the Committee is now engaged in the preparation of a list of qualified speakers to serve in this way. In addition, it is felt much could be gained through constructive coöperation with the newly formed Michigan Society for Mental Hygiene.

Further, it is believed that it might prove desirable that the Committee take an active interest in the various mental hygiene projects which are be-

ing set up and established in the state. In this way the medical profession would have representation in concerns having definitely a medical aspect, and would be in a position to contribute, from its sphere of competence, to their constructive functionality.

Finally, considering the increasing importance of psychiatry in preparation for the practice of medicine, it is suggested that the State Board of Registration consider including in its examinations a question, or questions, pertaining to this field.

Respectfully submitted,

M. H. HOFFMAN
G. F. INCH
G. A. LUCE
WM. H. MARSHALL
T. RAPHAEL, *Chairman*

REPORT OF SPECIAL COMMITTEE ON INSURANCE EXAMINATION FEES

At the annual meeting of the House of Delegates in 1935, the following resolution was offered by Muskegon County:

"WHEREAS, The medical examination of applicants for life insurance is an important part of the work of practicing physician, and

"WHEREAS, The activities of certain insurance companies and societies have been to the direction of basing the fee for medical examination on the type and amount of insurance requested, and

"WHEREAS, This tends to lower the standard of practice, be it, therefore

"RESOLVED, That a committee of the House of Delegates be appointed with authority to rate the type and scope of each class of medical examination and publish such rating in the Michigan State Medical Journal for the information of the county society."

The Reference Committee on Resolutions referred it to the Committee on Economics and on May 27 at a meeting of the Economics Committee, the question was again discussed and a subcommittee composed of Drs. Holmes, Armstrong, Miller and Van Duzen was appointed to submit a report to the House of Delegates with a view toward publishing such a schedule in THE JOURNAL.

There are three questions which must be satisfactorily answered to justify regulation of fees.

First, will it benefit the doctor?

Second, will it benefit the patient?

Third, is it unfair to a third party, that is the insurance carrier?

The standard fee of \$5.00 has always been acceptable and is manifestly fair. An examination entails practically a complete use of the faculties and equipment of the physician and each requires approximately the same service for the same complete examination. Certain fraternal and bargain types of insurance companies have, however, through various forms of unfair pressure, sought to have this complete examination made at a considerable reduction in fee. The doctor is expected to use the same mature judgment and careful examination as in the standard policy.

The patient is not being properly protected for generally the type of insurance given by these concerns is poorer insurance. The doctor is tempted to give less time and thought in this type of case, and

consequently the patient is lulled into a sense of physical security which is unwarranted.

The legitimate standard insurance company is forced to compete with an unfair type of competition; consequently the only one who gains is this particular underwriter who is using the physician as a means for preying on the public.

Another unfair practice by some companies is sending the doctor out to make a life insurance examination in the home. Here again most leading companies agree that a fair examination cannot be made in the home, and realizing that it is too often done simply to force the examiner to aid the agent in selling the policy, we have established an additional charge of one dollar which is made to the patient when a home visit is necessitated.

Your committee recognizes the fact that there are certain local problems in each County but we feel that the following schedule of fees† (which is official in Muskegon County), may well serve as a guide for other Counties upon which they can base their schedule.

REPORT OF LIAISON COMMITTEE WITH HOSPITAL ASSOCIATION

The wisdom of the House of Delegates at its 1935 session in recommending the appointment of liaison committees with hospitals, the bar, et cetera, has been proven by the experience of the Liaison Committee with the Hospital Association. Problems of mutual interest are presented, discussed, and a satisfactory solution recommended; annoying misunderstandings which impede desired progress are threshed out frankly and fully, and the road is cleared of obstacles. Only by joint meetings of these various groups interested in the same matters with but a slight difference of viewpoint, only by getting their feet under one table, can harmonious relations exist and advancement and growth result.

Subjects Under Consideration

1. Group Hospitalization was the first item discussed by this Liaison Committee of the Michigan State Medical Society with a similar committee of the Michigan Hospital Association. After full consideration, this Committee recommended to the Legislative Committee and the Executive Committee of the Council, Michigan State Medical Society, that it offer the services of the Legislative Committee of the Michigan State Medical Society to collaborate with a corresponding committee of the Michigan Hospital Association in considering permissive legislation for a prepayment plan for hospital services, exclusive of medical care, and to report back to the corresponding organizations for the mutual approval or disapproval, before submission to the Legislature for possible enactment.

It must be understood that this action in no way obligates the Michigan State Medical Society to any views on the question of group hospital insurance; it is felt, however, that this is a problem for study and discussion, and points out the very urgent necessity of just such complimentary committees from the two organizations contacting each other to discuss their various problems.

2. The complaint of the roentgenologists relative to their status with regard to the afflicted-crippled laws' administration was discussed plainly and without reservation by the two liaison committees, with the result that the hospital representatives moved

that the fee for roentgenologists for the care of afflicted and crippled children be included in Schedule A, on the same basis as medical and surgical fees, for both ambulatory and hospital cases.

3. Anesthesia administration was discussed by committee which prepared a statement re nurse anesthetists.

4. Other items on the agenda of this Liaison Committee include emergency service by residents and internes; principle of postpayment plan for medical care of the borderline group; definition of the responsibility to the patient by the doctor and by the hospital; collaboration between hospital social service agencies, emergency relief and other welfare agencies; staff organization and so-called practice of medicine by hospitals or unauthorized practice of medicine by institutions and organizations.

Recommendations

Your Liaison Committee of the Michigan State Medical Society to the Michigan Hospital Association, recommends to the House of Delegates of the Michigan State Medical Society:

1. That this special committee be continued, not as to personnel but as to aims and objects.

2. That the Michigan State Medical Society give very special attention to the study of the so-called prepayment plan for hospital care to the end that the House of Delegates, the Council, and the President of the Society may be in a position to act intelligently on this matter.

3. That this special committee be urged to contact the like committee from the Hospital Association at more frequent intervals; that the problems mentioned above be discussed and recommendations made to the proper authority of the Michigan State Medical Society.

Respectfully submitted,

T. K. GRUBER, M.D., *Chairman*
K. B. BRUCKER, M.D., *Lansing*
H. S. COLLISI, M.D., *Grand Rapids*
G. J. CURRY, M.D., *Flint*
W. C. ELLET, M.D., *Benton Harbor*

REPORT OF LIAISON COMMITTEE WITH THE STATE BAR OF MICHIGAN

This Committee is in receipt of a request on the part of the State Bar of Michigan that there be appointed a committee of the Michigan State Medical Society, or a number of committees, to testify in matters pertaining to malpractice cases upon the request of a court or either party to the litigation.

It was moved, seconded and duly carried that a subcommittee of this Committee be appointed to draft a resolution to be presented at the next meeting of this Committee to be held on the evening of September 20, 1936, in Detroit, embodying the ideas discussed at this meeting.

It was moved, seconded and duly carried that this Committee recommend to the Michigan State Medical Society that a committee of the Society be appointed to study and report upon the feasibility of the integration of the medical profession similar to that of the State Bar of Michigan.

There was a discussion of a joint meeting by the Michigan State Medical Society and the State Bar of Michigan. It was decided that this should not be held during the coming year, but that efforts should be made to hold such a meeting in the

†To be reported to House of Delegates.

following year, probably at the Annual Meeting of either one of the societies.

Respectfully submitted,

A. F. JENNINGS, M.D., *Chairman*
CHAS. S. KENNEDY, M.D.
C. W. BRAINARD, M.D.
R. H. DENHAM, M.D.

REPORT OF ADVISORY COMMITTEE TO THE WOMEN'S AUXILIARY

As chairman of the Advisory Committee to the Women's Auxiliary of the Michigan State Medical Society, I wish to submit a report that the members of the committee, at various times through the year have advised the ladies of the auxiliary on all occasions when such advice has been solicited or when we felt, at any time, that special information coming to us might be of value in the conduct of its program.

We have been in a position to appreciate the work and we realize the contribution the Women's Auxiliary is making to the practice of medicine.

The committee recommends continued support of the Michigan Medical Society to this organization.

J. M. ROBB, M.D., *Chairman*.

REPORT OF THE RADIO COMMITTEE

In view of the increased use of the radio as an educational medium, the Committee feels that it can serve a useful purpose by coöperating with the Chairmen of the various Committees of the State Society, for the purpose of assisting them in arranging radio programs for educational purposes in the special fields represented by the committees. At the same time, with the increased use of the radio, there is an apparent need to coördinate existing programs to the end that they will be presented to the public in an orderly and continuous series.

With these problems in mind, the Committee invited the following persons to a meeting at Detroit, on May 7, 1936:

Michigan State Medical Society, Committee Chairmen
Cancer Committee.....O. A. Brines, M.D.
Preventive Medicine.....L. O. Geib, M.D.
Advisory Committee on P. G. M.....J. D. Bruce, M.D.
Mental Hygiene.....Theo. Raphael, M.D.
Goiter Committee of Pediatrics Section..C. M. Cowie, M.D.
Maternal Hygiene.....A. M. Campbell, M.D.
Michigan State Dental Society.....A. C. Thompson, D.D.S.
University of Michigan.....Mr. Waldo M. Abbot
Joint Committee on Public Health Education.....
.....B. W. Carey, M.D., and Mr. Clare Gates

At the meeting it was agreed that the Committee should:

1. Take an inventory of all broadcasting stations in the State, listing all programs on public health and medical subjects according to the organization sponsoring them.

(a) *Broadcasting Service Inventory*.—The Committee requested the Joint Committee on Public Health Education, through its field secretary, Mr. Clare Gates, to make a survey of radio stations. This survey is completed. The results from personal interviews with the radio stations were:

WWJ, Detroit:

Three regular scheduled weekly programs; Detroit Health Department, Wayne County Medical Society and the A.M.A. through the red network.

WJR, Detroit:

Occasional programs. No regular scheduled weekly programs.

Michigan Radio Network:

1. WXYZ, Detroit Key Station for Michigan Radio Network. Daily programs, by Detroit Health Department, mornings. Bi-weekly programs, Michigan Tuberculosis Association, evenings. Both go over the network. Would gladly coöperate in a coördinated program.
2. WELL, Battle Creek. Occasional programs from network. Coöperation excellent.
3. WFDF, Flint. No scheduled programs. Have sought coöperation from local Medical Society unsuccessfully. Coöperation excellent.
4. WIBM, Jackson. No programs last year. Would welcome opportunity to coöperate.
5. WJIM, Lansing. Occasional programs from network. Coöperation questionable for donated time.
6. WBCM, Bay City. Weekly programs during winter by Medical Society. Coöperation excellent.
7. WASH, WOOD, Grand Rapids. City Health Department weekly. Coöperation excellent.
8. WKZD, Kalamazoo. Weekly programs from City Health Department and County Tuberculosis Society. Coöperation excellent.

Independent Stations:

1. WKBZ, Muskegon. Weekly programs by County Medical Society. Sponsored by a local drug store.
2. WMPC, Lapeer. Occasional programs. Coöperation not known.

Results from letters:

1. WJMS, Ironwood. Weekly programs, County Tuberculosis Society. Have sought coöperation from County Medical Society unsuccessfully. Would like coöperation.
2. WHDF, Calumet. No programs. No comment on coöperation.
3. WBEO, Marquette. No reply.

This survey reveals that the profession is not making full use of an important method of reaching the public for informational purposes. And further, that the directors of radio stations are anxious and willing to coöperate in a well-coördinated program that takes into consideration the various interests in health education.

The Committee feels that the State Society should stimulate the use of the radio as a means of public education.

2. Start a library consisting of radio talks on various subjects that could be made available to those requesting such material.

(a) *Library of Radio Scripts*.—With the coöperation of the American Medical Association, a library now consisting of over six hundred broadcasts has been started. New scripts will be added as rapidly as possible. The Library of the Wayne County Medical Society is also at the disposal of the Society.

3. Provide a means for directors of radio programs on medical and health subjects to exchange their schedules in order to present a more orderly and continuous series of programs.

(a) *Exchange of Existing Programs*.—The directors of existing regularly scheduled programs have agreed to exchange programs for future broadcasts.

4. Develop a program that would bring about a better distribution, throughout the State, of this form of public education.

(a) *Program Development*.—A long range program is being considered to the end that all recognized groups, such as the various Committees of

the State Medical Society, the State Dental Society, the University of Michigan, and others interested in radio broadcasting as a part of the health education program, will be coöperating in such a manner that there will be an orderly series of broadcasts carefully prepared and using authentic material. The plans under consideration are:

For trial purposes a program consisting of a series of eighteen weekly broadcasts, November through February, 1937, will be inaugurated. Responsibility for the material of each program in the series would rest with the appropriate committees or organizations with special interests in the different subjects present.

Plan of Presentation

Plan I. Weekly broadcasts over the Michigan Radio Network, through WXYZ.

There are eight stations in this network. The remaining five out-state stations would give the same program through the County Medical Society.

Plan II. The program would be prepared the same as though given over the network. The presentation, however, would be through the coöperation of the County Medical Society in the locality of each out-state station.

The above contemplated program will not replace or interfere with the broadcasts given over other Detroit stations. The plan is for the purpose of aiding local medical societies in participating in an educational program in which they should take a definite part. At the same time the society would be making use of educational facilities in their locality that, for the most part, have not been used in the past.

5. Evolve a plan for announcing future broadcasts in local newspapers.

(a) *Future Broadcasting Publicity.*—A program is being worked out that will serve to publicize future broadcasts on health subjects through local newspapers and weekly publications or bulletins.

It is readily recognized that this is a long range program, the details of which can only be worked out through a period of experience. The success of the program naturally depends upon the continued coöperation of those persons interested in this form of public education.

FRED H. COLE, M.D., *Chairman*
K. H. LOWE, M.D., *Battle Creek, Michigan*
JOHN SUNDWALL, M.D., *Ann Arbor, Michigan*

REPORT OF THE SPECIAL COMMITTEE TO SURVEY THE MEDICO-LEGAL DEFENSE FUND

At the session of the House of Delegates of the Michigan State Medical Society, held September 23, 1935, the following resolution was introduced:

WHEREAS, there is now assessed against each member of the Michigan State Medical Society an annual medical-legal fee of about two dollars, and

WHEREAS, it has been definitely established that a fixed majority of the members of the Michigan State Medical Society carry malpractice insurance policies with commercial insurance companies, and

WHEREAS, there seems to be urgent need for available funds for other more important functions of the Michigan State Medical Society, therefore, be it

RESOLVED, that all, or part of the Medical Legal assessments be diverted to other uses of the Michigan State Medical Society, and that the activities of the Medico-Legal Committee be correspondingly curtailed.

This was referred to the Reference Committee on Resolutions. This resolution was reported on favorably by the Reference Committee with the recommendation of the appointment of a committee to study the question. The report was approved by the House of Delegates and your committee was appointed by Speaker Reeder.

It was the understanding of the committee that the primary question was whether the Medico-Legal Defense Fund should be continued in its present form, whether it should be discontinued, or whether it should be retained in a modified form. We felt that this question should be attacked from several angles.

Six Angles

1. Is the existence of the Medico-Legal Defense Fund necessary to the majority of the members?

2. What is the value of the Medico-Legal Defense Fund to the Society as a whole?

3. Have the Society members received service commensurate with the amounts expended for this fund from the annual dues?

4. Are there any features of the Medico-Legal Defense Fund which are deleterious to the best interests of the medical profession?

5. Are we legally obligated to continue to furnish protection in the future if the Medico-Legal Defense Fund is obligated?

6. Would it materially affect the rates of commercial malpractice insurance companies if this fund was discontinued?

Conclusions

* 1. We first attempted to secure information as to what percentage of our members carried some form of commercial malpractice insurance. We attempted to secure, from thirty different counties, such information as they could give us on this point. Some of the counties did not coöperate as fully as we wished, but we secured sufficient information to say that about 94 per cent of our members carry commercial malpractice insurance. Of the other 6 per cent, the great majority were either retired or partially retired physicians or were men whose work was exclusively institutional. This would seem to indicate that the great majority of our active members are protected without our carrying on the Medico-Legal Defense Fund.

2. We felt, that if this 6 per cent were left without any adequate protection, it might have a deleterious effect upon the 94 per cent who are protected. Many competent attorneys do not have proper training to adequately defend malpractice suits. Anytime that a malpractice suit is lost it is apt to be the forerunner of other suits and might consequently serve to raise the rates of commercial companies. It is certain that the coöperation of the profession is important in maintaining economic protection service. We believe that the education of the profession in medical-legal problems and in how to avoid malpractice suits has been one of the most important phases of the Committee's work and is of value to our entire membership.

3. We attempted to contact all physicians who had malpractice threats or suits, securing their names from the representative of the Medico-Legal Committee. We found that all but three of the men who answered our letter had other forms of malpractice insurance and in these cases their defense was financed by the insurance company, al-

though in a number of such cases they were represented by the same attorney as is retained by the Medico-Legal Defense Committee. In some cases they were not clear whether the attorney was engaged by the Fund or by the Insurance Company. The opinion as to the value of this fund varied. Those who had no other form of protection were naturally enthusiastic. Some gave most of the credit of their defense to the insurance companies and some were unable to evaluate the comparative amount of help they had received from the insurance company and from the Medico-Legal Committee. It should be understood that many of our members received advice from the Committee on problems that did not terminate in suits.

4. In regard to the fourth point as to whether any features of the Medico-Legal Defense Fund are deleterious to the best interests of the profession. It is undoubtedly true that, to some extent, the existence of such a fund reduces the value of the medical testimony of our members and we have judicial decisions that this point can be brought before the jury.

5. As to whether we are legally obliged to continue to furnish protection in the future, it is true that we would be morally and probably legally bound to protect against malpractice cases arising from the care of minors inasmuch as suit can be instituted in such cases two years after such minor becomes of age. We have, however, an ample reserve fund which could be used for such purposes.

6. It was rather difficult to secure adequate information as to the effect upon commercial malpractice insurance rates of discontinuing the Medico-Legal Defense Fund. Correspondence with these companies was rather unsatisfactory. The American Medical Association had no information of value since 1927. We corresponded with all of the State Societies and it would seem that the rates are somewhat higher in States which have no Medico-Legal Defense Fund. This finding is not conclusive evidence as we find that the rates vary rather widely in different States, depending apparently upon the experience of these commercial companies in different areas. In at least one State we found that there were different rates for metropolitan and rural areas. It seems, however, that it might be reasonable to expect that there would be some increase in rates. As we stated before, any malpractice which is lost is always a potential focus for other suits and there is always the danger that some of our unprotected members would be unable to secure adequate defense, thereby encouraging unscrupulous members of the legal profession to agitate such suits.

7. The last report of the Medico-Legal Defense Fund was that at the present time there is a balance of \$15,413.24 in this fund. We do not feel that the fees paid attorneys of this fund have, in the past, been excessive, but do feel that up to this year a rather unnecessarily large amount has been taken out of each member's dues of the fund. It has been higher than other states are appropriating. Many states do not have a fixed amount earmarked, but appropriate what is necessary out of the general fund. In some states the balance in the Fund is not allowed to go beyond a stated amount. We believe that if certain checks are placed on the use of this fund and if it is handled in the most economical way it would serve our membership as well, or better than in the past and yet make available more money for other uses of the Society.

Recommendations

From our study, we would recommend:

1. That the Fund continue, but that in the future its functions be to a much greater extent, educational and advisory.

2. That no defense in court should be carried out without consent of the Executive Committee of the Council.

3. That no fee shall be paid to the attorney of this fund in cases which are defended by commercial companies.

4. That in the future no more than fifty cents per member per annum be apportioned from the State dues for this fund.

5. That as soon as is practical, the work now carried on by the Secretary of the Medico-Legal Committee be transferred to the Executive office of the Michigan State Medical Society in Lansing. This, we believe, will be more economical and will carry out the idea that all Society activities be integrated through the Executive Office of the State Society.

6. That an attempt be made to integrate the work of the Medico-Legal Committee and the Ethics Committee of both State and County Societies, as we feel this would serve to keep down the number of malpractice suits.

7. We found in our study that many of our members have a rather vague understanding of the functions and purposes as well as the limitations of our Medico-Legal Defense Fund. We recommend that this should be clarified to the members as a whole and that all of our members be urged to carry commercial protection in addition to the aid furnished by the State Society.

I. W. GREENE, *Chairman*
R. H. HOLMES
DEAN HART
F. T. ANDREWS
W. R. TORGERSOON

A SUMMARY OF PROCEEDINGS OF THE HOUSE OF DELEGATES

Seventieth annual session of the Michigan State Medical Society held at Sault Ste. Marie, September 23 and 24, 1935.

1. Voted on motion of the Reference Committee on Report of the Council that there be appointed a standing committee of the House of Delegates whose duty it shall be to review the transactions of each meeting as recorded in the JOURNAL from time to time in order that it may bring to the House of Delegates a report commensurate with the importance of the continuing activities of the Council during the entire year (723*).

2. Recommended that the Council investigate the possibilities for good that would result if each county organization retained at its own expense a legal adviser (724*).

3. Voted that the Legislative Committee of the Michigan State Medical Society should re-introduce a barbituric acid bill into the next session of the Legislature instead of having it sponsored by the State Commissioner of Health (724*).

*Page numbers refer to pages in the November, 1935, issue of The Journal of the Michigan State Medical Society.

4. Instructed the Council to find out and have a brochure printed, telling the various members what the laws of Michigan are in regard to the practice of medicine (726*).

5. Accepted and adopted with thanks the report of the Cancer Committee; the Preventive Medicine Committee; recorded with thanks the report of the Maternal Health Committee; report of Delegates to the American Medical Association; Auxiliary Advisory Committee; Radio Committee (727-728*).

(In the course of the deliberations the Speaker made the following ruling: "THE SPEAKER: ----- on the reports which you do not want adopted, if you make no motion with reference to them, they are then a part of the records of the Society without action and the Chair would recommend that you use both words, 'accept' and 'adopt' on the others.")

6. Accepted and adopted the eight recommendations of the Legislative Committees as follows:

First: That the legislative program of the Michigan State Medical Society should be a continuing program, year in and year out. The legislative bills to be proposed should be drawn up and submitted to the Council for approval during the non-legislative year.

Second: Every county and district medical society should be stimulated to develop satisfactory and active legislative committees whose legislative policies are definitely established and unified throughout the state, namely, contacting legislators and keeping a closer relationship with public officials.

Third: The chairman of the Legislative Committee of the State Society should keep the chairmen of the Legislative Committees of each county and district medical society informed concerning any legislation relating to medicine that is contemplated or in the process of passage. The local chairman should, in turn, pass work along to members of his committee. Each member of the Senate and House of Representatives in the particular county or district should be covered by at least one physician, preferably the family physician. The key-man should contact the legislator frequently, become his friend, and give advice on legislation relative to medical practice in advance of the bi-annual election. All candidates for offices which touch the practice of medicine should be contacted and given the right viewpoint, and the records of all such contacts and viewpoints of each legislator should be kept on file with the executive secretary of the State Society.

Fourth: An executive secretary should be on the job, permanently in Lansing, to coördinate all these activities and institute new programs. He should be assisted by a legislative observer appointed by the Legislative Committee and approved by the Council. The work of the legislative observer shall be arranged by the Legislative Committee with the coöperation of the executive secretary of the Michigan State Medical Society.

Fifth: That we propose that the dues of the Michigan State Medical Society be raised \$1.50 a year, to its Constitutional limit for educational purposes, this percentage of the total dues to be allotted to carry out the program as stated in Number Four.

Sixth: The Legislative Committee of the State Society should consist of seven members instead of five as at present. Five members should be appointed as at the present time for a period of two years, the sixth member should be the president-elect of the State Medical Society and the seventh member should be the Chairman of the Council.

Seventh: We endorse a Michigan Health Council or Allied Health Group which should be formed of representatives of the organizations of physicians, dentists, nurses, and pharmacists, working co-operatively in health legislation and representatives of the organizations of teachers, lawyers, and social workers. Your Reference Committee recommend that the President of the Michigan State Medical Society be empowered to develop such a Health Council in this State. This Health Council should be an integral organization throughout every county and district.

Eighth: We respectfully recommend that the Legislative Committee of the State Society give due consideration to and prepare a report to the House of Delegates and the Council on the following problems at the next annual meeting:

- (a) the integration of medicine;
- (b) the unauthorized practice of medicine;
- (c) the Basic Science Laws;
- (d) the revision of the Medical Practice Act (729*).

7. Requested the Council to appoint a committee who are to immediately contact the Michigan Crippled Children Commission, the Administrative Board and other interested agencies and present our demands for consideration of an adequate fee schedule and that they be empowered to institute such court proceedings as may be necessary to clarify the intent of the present laws governing the activities of the Michigan Crippled Children Commission.

Adopted amendment to the above, defining "adequate fee schedule" as 50 per cent of the normal average fees (731*).

8. Concurred in the report of the sub-committee on the FERA survey of relief medicine, in that

(1) The administration of medical welfare relief should be in the hands of a special relief organization such as a state welfare department.

(2) Medical relief should be administered by a qualified medical director and in such a manner as not in any way to infringe upon the personal physician-patient relationship.

(3) Fees for special services to be determined by collaboration between state and county medical society representatives (732*).

9. Accepted and adopted the recommendation "that a committee such as the present Advisory Committee on Postgraduate Medical Education be appointed by the Council and be made a permanent standing committee empowered to make such rules and regulations as are required for the granting of certificates of attendance and of such degrees of proficiency as are decided upon" (732*).

10. It provided for a section on Radiology of the Scientific Assembly (733*).

11. It officially granted the Grand Traverse-Leelanau Medical Society to permit territorial inclusion of the physicians of Benzie County and to change the name of that society to the Grand Traverse-Leelanau-Benzie County Medical Society (733*).

12. Established Eaton County as a component part of the Second Councilor District, associated with Ingham, Jackson and Hillsdale Counties (733-734*).

13. Amended Chapter 6, Section 2 of the By-laws to provide for a seven-man committee on Legislation, comprising the President-elect, the Chairman of the Council and five members to be appointed by the President with the approval of the Council, for the term of two years, excepting the first year, when the President shall appoint three men for two years and one man for one year (734*).

(Continued on Page 626)

WOMAN'S AUXILIARY

Mrs. A. M. GIDDINGS, President, 22 Riverview Ave., Battle Creek

Mrs. KENNETH LOWE, Secretary-Treasurer, 107 Elizabeth St., Battle Creek

Mrs. L. C. HARVIE, Press Chairman, 341 Brockway Place, Saginaw

STATE MEETING

THE Woman's Auxiliary to the Wayne County Medical Society anticipate with pleasure the meeting of the Michigan State Medical Society in Detroit, September 21-24.

Mrs. Roger V. Walker, president of the local Auxiliary, will serve as general chairman and has appointed the following committee chairmen:

Entertainment, Mrs. Harry W. Plaggemeyer; Hobby Exhibit, Mrs. Milton D. Vokes; Publicity, Mrs. Frank W. Hartman; Transportation, Mrs. Audrey O. Brown; Registration, Mrs. Hugo A. Freund.

The committees have worked diligently during the summer and happily announce the program as follows:

- Mon., Sept. 21 Registration, Book-Cadillac Hotel
- Tues., Sept. 22 8:30 A.M. Pre-Convention Board Meeting, Breakfast, Book-Cadillac
10:30 A.M. Annual Meeting, Founders' Room, Book-Cadillac
(County Presidents to read reports at this meeting.)
1:00 P.M. Annual Luncheon, Book-Cadillac
6:30 P.M. Dinner-Bridge, Women's City Club
- Wed., Sept. 23 8:00 A.M. Post-Convention Board, Mrs. A. V. Wenger, Presiding
Book-Cadillac, Room to be announced
9:30 A. M., Visit Mr. Henry Ford's Greenfield Village
1:00 P.M. Luncheon, Dearborn Inn
- Thurs., Sept. 21-24, Hobby Exhibit, Parlor C, 4th floor Book-Cadillac Hotel

Members of the Auxiliary State Board expected in Detroit during the meeting include the President, Mrs. A. M. Giddings, Battle Creek; President-Elect, Mrs. A. V. Wenger, Grand Rapids; Vice-President, Mrs. J. A. McLandress, Saginaw; Secy.-Treas., Mrs. Kenneth Lowe, Battle Creek; Past President, Mrs. F. T. Andrews, Kalamazoo; Program, Mrs. G. C. Hicks, Jackson; Public Relations, Mrs. Ledru O. Geib, Detroit; Press, Mrs. L. C. Harvie, Saginaw; Organization, Mrs. J. A. McLandress, Saginaw; Legislation, Mrs. L. G. Christian, Lansing; Revision, Mrs. J. H. Dempster, Detroit; Hygeia Chairman, Mrs. Carl Snapp, Grand Rapids; Historian, Mrs. J. Earl McIntyre, Lansing.

Also members of the Advisory Council, including, Chairman, Dr. J. M. Robb, Detroit, Dr. F. T. Andrews, Kalamazoo, Dr. G. H. Yeo, Grand Rapids.

Members of the Medical Society and their families are cordially invited to participate in the Hobby Exhibit. The dead line for entries being Friday, September 18. Please contact the chairman promptly!

The wives, mothers, daughters and sisters of visiting and local doctors are expected to enjoy the program whether or not they are members of the Auxiliary. New members will be welcomed during the meeting.

(Mrs. Frank W.) BLANCHE B. HARTMAN,
Press Chairman.

HOBBY EXHIBITION WELL UNDER WAY

Each day brings in more exhibitions for the hobby show and by the time the annual meeting opens we may have to plan arrangements to hang some from the ceiling. Here are some of the exhibitors and some of the things which we think will be of interest.



MRS. A. M. GIDDINGS, State President,
Battle Creek, Michigan

One of the first entries to be received was that from the antique collection of Dr. A. O. Brown. This consists of antique "cup-plates," a purely American antique for none has been found elsewhere. Dr. Brown also has a collection of spectacles which he promises to show.

The second contributor was Dr. W. W. Kahn, who has been making a collection for some time of paintings done by Detroit artists. As this is a very large collection only about twenty can be shown. It has been exhibited in other parts of the country so we are happy to have it shown in its own city by its own collector.

Dr. Emil Amberg is interested in doing pencil sketches and will show several which he has done of physicians, nurses and patients. Dr. Lawrence A. Chrouh also does pen and ink drawings and some of those which he will show are entitled "The Grape Arbor," "Under Full Sail" and "The Lodge."

Dr. B. J. Sawichi collects American pottery and has a collection of rare Rockingham. We are anxious to see what this fine old ware is like. Flasks of great age are included in this collection.

Many of the ladies are also collectors and an unusual display is promised which will include a complete section of a room, everything of the most aged antique. Some of the ladies do things other than collect. Mrs. James H. Dempster does oil paintings and promises to show some of her skill, as does Mrs. I. Mayer, who does water and oils. Mrs. Mayer also promises us the rare treat of seeing some of her beautiful tankards which she painted. Two of these, "Old Monk" and "Rembrandt" are masterpieces. Miss Ethel Cole has also entered two paintings, the titles to be sent in later.

Dr. A. M. Giddings of Battle Creek will exhibit



MRS. GUY L. KIEFER, Honorary President,
Lansing, Michigan



MRS. A. V. WENGER, Vice President
Battle Creek, Michigan



MRS. J. A. MCLANDRESS, Vice President
Saginaw, Michigan



MRS. H. K. LOWE, Secretary-Treasurer
Battle Creek, Michigan

some of his Civil War books as well as his battle-field relics. Dr. Milton D. Vokes will show some of the relics which he has been collecting since he was a boy. These consist of arrow-heads, weapons, pipes and other Indian relics.

Dr. W. B. Cooksey has an unusual hand-made leather cane which everyone will be interested in seeing.

Dr. Clarence E. Maguire has promised to exhibit his collection of beautiful Chinese relics, among which is an Emperor's coat, a princess' coat, cloisonné vases, box and trays, hand-woven and embroidered panels and an interesting religious prayer rug.

The only Junior who offers to contribute to date

is Allan Giddings, who has a ship model which he wants the other doctors' sons to look over. We wonder what all those other sons have to show and why they don't send in their entries. Not only are doctors invited to exhibit but their wives and children are being given a special invitation.

Dr. George M. Livingston is glad to "show off" his class books, which cover a period of almost forty years. These are five in number, the first ones were very unpretentious but the last ones, to use Dr. Livingston's expression, are "pretty nifty." Another is now in the press but probably will be available by September, when we hope to see the "most nifty."



MRS. L. G. CHRISTIAN, Chairman of the Legislation Committee, Lansing, Michigan

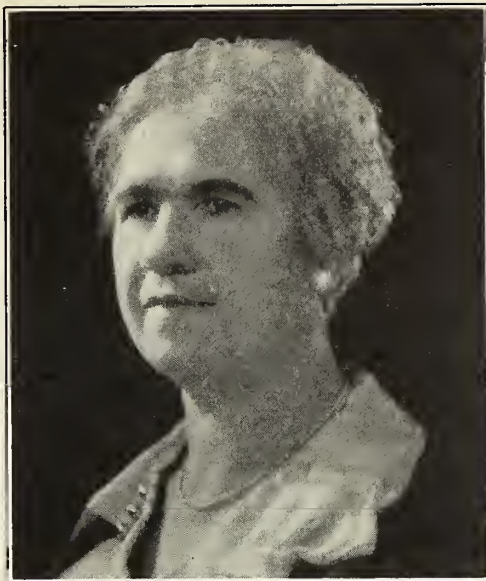


Photo by C. M. Hayes & Co., Detroit
MRS. J. H. DEMPSTER, Chairman of the Revision Committee, Detroit, Michigan



MRS. G. C. HICKS, Chairman of the Program Committee, Jackson, Michigan



MRS. L. GEIB, Chairman of Public Relations Committee, Detroit, Michigan

We hear of everything imaginable being done by the profession. One doctor raises prize pumpkins, another has made holes in one too numerous to mention, but who has heard of the doctor who invents and manufactures? A big surprise is in store for surgeons when they see the invention which Dr. Clarence Baker has designed and manufactured. This, we are told, gives marvelous concentrated light and has an everlasting bulb.

Two ceramists are on the list and both are the wives of doctors. Mrs. Donald Drummond promises several pieces of her own creation. Mrs. Milton D. Vokes will also show pottery and figures which she has modeled. Mrs. Vokes makes her pieces,

glazes and fires them in her own kilns.

Dr. W. R. Chynoweth of Battle Creek will exhibit oil paintings and charcoal drawings.

Dr. Wayne A. Geib will exhibit an Insect Collection.

Mrs. Wm. Klein will exhibit Water Color and Oil Paintings.

Mrs. Frederick T. Munson will exhibit One Printed Linen Campaign Poster used in Ireland during the Repeal of Corn Act.

Mrs. Fred K. Munson will exhibit a collection of old books (six).

Mrs. C. S. Kloeppel will exhibit a collection of antique quilts.

The "Hobby Exhibition" is to be held at the Book-Cadillac Hotel in conjunction with the Michigan State Medical Convention, which will be held in Detroit September 21 to 24, inclusive. Entries are open until September 10, 1936. Those who decide to enter an exhibit are asked to fill in the form or to notify Mrs. Milton D. Vokes, 444 East Grand Boulevard, Detroit, Michigan.

The members who are on this committee are:

Chairman, Mrs. Milton D. Vokes; Co-chairman, Mrs. Ignatz Mayer; Mrs. Henry Dunlap, Mrs. Jack Agins, Mrs. Lowell Bush, Mrs. James H. Dempster, Mrs. J. J. Drake, Mrs. George L. Waldbott, Mrs. John W. Gordon, Mrs. Harlod F. Sawyer, Mrs. Alexander Cruikshank, Mrs. Harold J. Hammond, Miss Elsa Chene, Mrs. Robert Beattie, Mrs. Basil Connelly, Mrs. S. P. L'Esperance, Mrs. Ray Dixon, Mrs. Clarence E. Maguire, Mrs. Frederick T. Munson, Mrs. Clifford B. Loranger, Mrs. Milton A. Darling, Mrs. Frederick Hansen, Mrs. R. L. Novy, Mrs. Clarence Owen, and Mrs. C. D. Eaton.

Articles are to be in by September 18, 1936. These are to be sent to: "Hobby Exhibition," Michigan State Medical Convention, Washington Room, Book-Cadillac Hotel, Detroit, Michigan, care of John F. Ivory Co.

An invitation is extended to you to place on exhibition any work which you are interested in doing or collecting—sculpture, painting, woodwork, patch quilts, stamps, books, embroideries, metal work, glass, photography or any other hobby.

Your support is asked in this unusual undertaking. The committee plan to have a printed booklet which will contain the names and addresses, as well as the exhibitions of all interested parties. Therefore, you are urged to get your entry registered by September 10, 1936.

Heating of Human Tissues by Short Wave Diathermy

John S. Coulter and Howard A. Carter, Chicago (*Journal A.M.A.*, June 13, 1936), studied the heating efficacy of short wave diathermy in living human fat and muscle of the thigh, employing, first an electric field of 6, 12, 18 and 24 meter wavelength, using the cuff electrode technic; secondly, an electromagnetic field of 12, 18 and 24 meter wavelength, using the coil technic. There were no significant differences in the use of 6, 12, 18 and 24 meter wavelengths when using the cuff technic of the electric field method and no significant differences in the use of 12, 18 and 24 meter wavelengths when using the coil technic of the electromagnetic field method. A practical and social problem becoming more and more important is the interference of short wave diathermy energy with radio communications. Two remedies have been proposed: one is the allocation of a special wavelength band for therapeutic purposes and the other is the proper screening of short wave diathermy machines and equipment. If, in subsequent investigations, a single frequency was found to be satisfactory for all treatments, the oscillators would have to be stabilized so that deviation of no more than a kilocycle from this assigned frequency would ever occur. Short wave diathermy machines would have to be manufactured with a frequency stability corresponding to a good radio transmitter. If the second remedy should be adopted, radio-frequency filters or wave traps would have to be inserted in the power leads to prevent reradiation of the high frequency energy back into the power mains, and the treatment room would have to be screened and grounded. Because of the ever increasing need for radio communication channels, it would seem that the method of screening and line filtering takes precedence over the allocation of a wave band for therapeutic purposes.

MICHIGAN'S DEPARTMENT OF HEALTH

C. C. SLEMONS, M.D., Dr.P.H., Commissioner
LANSING, MICHIGAN

Postgraduate Instruction in Obstetrics

The Bureau of Child Hygiene and Public Health Nursing, in cooperation with Dr. James D. Bruce, director of postgraduate medicine at the University of Michigan, has outlined the tentative schedule of courses in postgraduate instruction in obstetrics which will be offered to all doctors in the northern part of the Southern Peninsula beginning Monday, September 28.

Traverse City, Petoskey, Alpena and Grayling have been selected as the postgraduate centers. The proposed plan is to have an illustrated lecture in the evening followed the next morning by individual consultations if desired. This schedule will be followed each week for six weeks.

Dr. Alexander Campbell of Grand Rapids, chairman of the maternal health committee of the Michigan State Medical Society, will conduct the lectures. The topics which he has tentatively chosen include the following: (1) Maternal and Fetal Mortality, (2) Prenatal Care, (3) Toxemias of Pregnancy, (4) Conduct of Normal Labor, (5) Management of Complications of Labor, and (6) Postpartum Care. Additional topics and subtopics may be included before the final agenda is settled.

Tentative dates for the first sessions at the various centers are as follows:

Traverse City—Evening of September 28 and morning of September 29.

Petoskey—Evening of September 29 and morning of September 30.

Alpena—Evening of September 30 and morning of October 1.

Grayling—Evening of October 1 and morning of October 2.

These postgraduate courses in obstetrics for doctors are part of the Social Security program looking toward the improvement of maternal and child health in Michigan.

Advisory Committee Appointed

The director of the Bureau of Child Hygiene and Public Health Nursing met with the Michigan Branch of the American Academy of Pediatrics in Detroit, July 17, and discussed the scope of the Social Security program for maternal and child health as it is being developed in Michigan.

An advisory committee of three members was appointed to work with the director in the development of this program. Members of this committee include Dr. L. F. Foster of Bay City, Dr. Frederick B. Miner of Flint, and Dr. Rockwell M. Kempton of Saginaw.

Dr. Joseph H. Johnston of Detroit was named as a committee of one on postgraduate instruction in pediatrics under the Social Security program.

County Nursing Programs

The director of the Bureau of Child Hygiene and Public Health Nursing announced that a county-wide nursing service will be established in thirty-one Michigan counties as part of the Social Security program for the improvement of maternal and child health. Many of these counties have had no generalized public health nursing program in the past.

Medical societies in thirty-one out of thirty-two counties to which this service has been offered, have

approved the program, and advisory committees are being appointed to aid in the development of the county programs. The general program is being carried out with the approval of the council of the State Medical Society.

The nursing service will emphasize health education for prospective mothers and children under school age. Women's classes, child care classes, prenatal nursing programs, maternal and infant welfare programs, the delivery of birth certificates, including a discussion of diets and general health problems of the family, and a series of prenatal and postnatal educational letters will be included in many of the county programs.

County programs already in operation include the following: St. Clair and Luce counties, prenatal nursing program; Kalamazoo, Laneer, Muskegon, Gratiot, and Tuscola, maternal and child health nursing program; Mecosta, Osceola, and Marquette, women's classes; Huron and Sanilac, summer infant and maternal welfare program. The Clinton and Montcalm nursing programs will be taken over by the Bureau of Child Hygiene and Public Health Nursing, and Cass county is also in process of organization.

Other counties which have accepted the maternal and child health program include Bay, Arenac, Iosco, Gladwin, Berrien, Delta, Houghton, Baraga, Keweenaw, Alger, Lake, Antrim, Charlevoix, Emmett, Cheboygan, and St. Joseph.

Ten Principal Causes of Death in 1935

Organic heart disease again heads the list of ten principal causes of death in 1935, according to figures compiled by the Bureau of Records and Statistics. A three per cent increase in the toll of this disease was indicated with 9,578 deaths recorded last year compared to 9,275 the previous year.

Cancer remains in second position, causing 5,187 deaths in 1935, which is also a slight increase. Apoplexy is the third principal cause of death with 3,907 deaths recorded; pneumonia, fourth with 3,805 deaths; and nephritis, fifth with 2,974 deaths. These five causes occupy the same relative positions as in previous years.

Coronary disease and angina pectoris replace accidents, exclusive of automobile, as the sixth major cause of death, with 2,352 deaths recorded in 1935. There were 2,161 deaths from accidents in the home, in occupations and in other pursuits where automobiles did not figure. Tuberculosis continued its declining trend, last year, when it dropped to eighth place. There were 2,045 deaths recorded in comparison with 2,199 the previous year.

Automobile accidents claimed the lives of 1,665 persons in Michigan last year to rate as the ninth major cause of death. Diabetes remained in tenth place, causing 1,230 deaths in 1935. If automobile accident deaths were combined with deaths from other accidents, there would be a total of 3,826 deaths from accidental causes. This would place accidents in fourth position as a major cause of death.

The 34,904 deaths from these ten causes constitute 68 per cent of all the deaths recorded in 1935. There were 51,051 deaths recorded in 1935 from all causes. The death rate was 10.05 per 1,000 population, a continuation of the slight increase over the depression low marked in 1933 by a rate of 9.62, the lowest in Michigan history.

Supervision of Sewage Disposal Plants

Increasing installations of sewage disposal plants by Michigan municipalities and institutions and the consequent demand for adequate supervision have caused the Bureau of Engineering to add to its staff

an engineer trained in this field. Mr. C. T. Mudgett, graduate in civil engineering from the University of Illinois, who has specialized in the supervision of sewage treatment operations, will be in charge of this service.

There are 60 municipal sewage disposal plants now in operation in addition to 15 institutional systems. Plants at Ann Arbor and Jackson are nearing completion and will be in operation this fall. Eight other plants are under construction. Plans are being prepared and the money is available for financing the huge treatment plant at Detroit, which will decrease the present serious pollution of the Detroit River to the menace of down-stream communities. This state-wide expansion in the construction of sewage treatment plants is a major step toward the control of stream pollution in Michigan.

Roadside Survey and Resort Inspection

The Bureau of Engineering will not conduct its usual inspection of roadside water supplies and resorts, this year. This service to the tourist and resort industry of Michigan will be temporarily discontinued owing to the lack of available funds. Whatever work is done in this field this year must be carried on by the local health departments.

In the 1935 roadside water survey, 2,455 sources along 7,626 miles of trunk line highways were tested for safe drinking purposes. Safe supplies were indicated by the familiar yellow and black signs of the Michigan Department of Health. Approximately 1,895 resorts were inspected as to their sanitary conditions; classification certificates and recommendations were sent to resort owners.

Past records indicate that the percentage of safe water supplies increases following the inauguration of state inspection. This sanitary service had come to be an attractive feature in bringing visitors to the recreational areas of the state, receiving much favorable comment and guarding against unfavorable publicity caused by insanitary resort conditions.

Rabies

It is usual, at this time of the year, to have attention focused on rabies among dogs and dog bites of humans. As is generally known by physicians, it is not so much that rabies is more prevalent during the hot season and so-called dog days but rather that popular conception believes it to be so.

A year ago during the summer there was a considerable amount of rabies in and about Detroit and the southeastern part of the state. Recently, rabies seems to be more prevalent in and about Pontiac. There has been a demand for rabies vaccine and at times the supply provided by the Michigan Department of Health has been exhausted. However, no individual has gone without the vaccine because of shortage.

It is often difficult to determine whether an individual should have the rabies vaccine. If a person has been bitten by a dog which has escaped and cannot be recovered, then there is only one conclusion, "Play safe and give the vaccine." It is always advisable to securely confine the dog if possible and await developments. Vaccine need not be given even to those individuals bitten unless such dogs die or show some signs of illness within seven to ten days. It is safe to await the first appearance of symptoms in the dog before giving the vaccine to the persons bitten.

Dog heads, in the city of Detroit, may be sent for examination to the City Health Department Laboratory; elsewhere in the state they may be sent either to the Laboratory of the Michigan Department of Health at Lansing or the Pasteur Institute at Ann Arbor.

Invitational Golf

September 22



THE Golfers of the Michigan State Medical Society are invited for invitational golf at the Detroit Golf Club on Tuesday afternoon, September 22, on the occasion of the Annual Convention of the State Society in Detroit.

Play will begin at 1:00 p. m. Two perfect eighteen hole courses are available. The regular green fees of \$1.50 will be charged. Coupon books to pay expenses of caddies, green fees, dinner, etc., may be purchased at the club.

Prizes Donated by Friends

Prizes for experts, dubs, beginners—and even kickers—will be awarded. These trophies are being contributed by officers of the State Society and other friends of the medical golfers of Michigan. Dr. Grover C. Penberthy, Detroit, is placing the President's Trophy in competition; Dr. H. E. Perry, Newberry, is contributing the President-Elect's prize; the James H. Dempster Cup is being presented by an old friend of the Editor of THE JOURNAL, Mr. J. R. Bruce of Saint Paul.

Secretary C. T. Ekelund, Pontiac; Treasurer Wm. A. Hyland, Grand Rapids; Chairman of The Council Henry Cook, Flint; Speaker Frank E. Reeder, Flint; and Vice-Speaker Philip A. Riley, Jackson—all are contributing prizes. Other friends swelling the list include Dr. J. M. Robb, Detroit, Past-President of the M.S.M.S.; Dr. H. A. Luce, Detroit, Past-Speaker of the House; Dr. L. Fernald Foster, Bay City, Chairman of the Public Relations Committee; Dr. T. K. Gruber, Eloise, President of the Wayne County Medical Society; Dr. F. B. Burke, Detroit, President-Elect of the Wayne County Medical Society; Dr. E. I. Carr, Lansing, President of the Ingham County Medical Society; Bill Mennen, Newark, N. J.; and Executive Secretary Bill Burns.

The two Councilors of the host city, Dr. A. S. Brunk and Dr. H. R. Carstens of Detroit, are also placing a trophy in competition. So is the Wayne County Medical Society.

Five Flights

Prizes will be awarded for low gross for the field, 18 holes; low net for the field, 18 holes; maturity event, limited to players 50 years and over; and in the five flights: championship flight, for players with handicaps of scratch to 10; first flight, 11 to 15 inclusive; second flight, 16 to 20 inclusive;

third flight, 21 to 29 inclusive; fourth flight, handicaps of 30. Both gross and net awards will be made in all flights except the fourth which will be net only. The Kickers Handicap (blind bogey) will also have a number of prizes.

Dinner will be served in the beautiful clubhouse at 6:30 p. m. promptly and will be \$1.65, including the service charge. Distribution of prizes following the dinner will be completed by 7:30 p. m. so that all may get back to the Book-Cadillac Hotel for the Wayne County Medical Society Smoker at 8 o'clock. Buses will leave from the Book-Cadillac and the Statler Hotels for the Detroit Golf Club, and will also return the physicians from the club to the hotel in the evening. The fee will be nominal.

Inter-city Matches

The Detroit committee in charge of arrangements is composed of Dr. C. D. Brooks, Chairman, Drs. Donald V. Clark, R. C. Leacock, L. J. Morand, L. S. Potter, and Walter Wilson. Individual physicians desiring games with medical golfers residing in other cities of Michigan are invited to write the Chairman who will endeavor to arrange these desirable and enjoyable inter-sectional matches.

One of the
prizes
to be awarded
to the
golfers of the
Michigan State
Medical Society



JOUR. M.S.M.S.

GENERAL NEWS AND ANNOUNCEMENTS

The One Hundred Per Cent Club of the Michigan State Medical Society

composed of county medical societies which have paid dues in full for each and every member of the county and state medical societies, now totals twenty-three societies:

1. Alpena County Medical Society
2. Eaton County Medical Society
3. Gogebic County Medical Society
4. Grand Traverse-Leelanau-Benzie Medical Society
5. Hillsdale County Medical Society
6. Ingham County Medical Society
7. Lenawee County Medical Society
8. Luce County Medical Society
9. Manistee County Medical Society
10. Mecosta-Osceola County Medical Society
11. Midland County Medical Society
12. Muskegon County Medical Society
13. Newaygo County Medical Society
14. Northern Michigan Medical Society
15. Oceana County Medical Society
16. Ontonagon County Medical Society
17. Ottawa County Medical Society
18. Saginaw County Medical Society
19. Saint Clair County Medical Society
20. Schoolcraft County Medical Society
21. Shiawassee County Medical Society
22. Tuscola County Medical Society
23. O. M. C. O. R. O. Medical Society

Locum Tenens: In Vestaburg, Michigan, Montcalm County. If interested, write Executive Office, 2020 Olds Tower, Lansing, Michigan.

* * *

Opening for a physician available in St. Joseph Michigan. General practice. For information write Executive Offices, 2020 Olds Tower, Lansing.

* * *

Important Dates

September 15, 1936—General Primary Election.
November 3, 1936—General November Election.
January, 1937—Legislature convenes in Regular Session.

* * *

The annual meeting of the Wabash Surgical Society will be held at the Statler Hotel, Detroit, Michigan, Monday and Tuesday, September 14 and 15, 1936.

* * *

State Society Night will be celebrated by the Ingham County Medical Society on Tuesday, October 20, 1936, shortly after the Annual Meeting of the M.S.M.S. The newly elected officers of the State Society will be honored.

* * *

Judge Merle H. Young of Van Buren County has been elected President of the Michigan Association of Probate Judges. Judge Frank L. McAvinchey of Genesee County has been chosen as Chairman of the Legislative Committee. Congratulations!

* * *

"The Allegan County Medical Society" now exists. The physicians in Allegan County were granted a charter as a County Medical Society on July 29, 1936. Officers of the new society are Dr.

G. H. Rigterink, Hamilton, president; Dr. O. H. Stuck, Otsego, vice president; Dr. R. A. MacNeill, Allegan, treasurer; Dr. M. B. Beckett, Allegan, secretary; Dr. W. C. Medill, Plainwell, delegate; Dr. E. T. Brunson, Ganges, alternate. Best wishes for success in your undertakings and efforts, members of Allegan County Medical Society!

* * *

Dr. Fred P. Currier and family, of Grand Rapids, have returned to the United States after visiting ten months in England, Belgium, Holland, and Germany. Doctor Currier spent nine months of that time in the study of nervous diseases at the National Hospital, Queen's Square, London.

* * *

Public invited: Members of the public are invited to see the fifty-two Scientific Exhibits and the seventy-two Technical Exhibits at the Detroit Meeting of the M.S.M.S. Tuesday afternoon, September 22, will be the date of the public inspection. Much information and medical instruction will be found by the people who visit these exhibits.

* * *

Afflicted Child Commitments:

July, 1936—923 cases, of which 253 went to University Hospital

June, 1936—903 cases, of which 259 went to University Hospital

May, 1936—1,325 cases, of which 262 went to University Hospital

* * *

County medical societies desiring assistance in obtaining speakers for their meetings are invited to send their requests to the Michigan State Medical Society which will endeavor to obtain men of outstanding talent to appear before the members of the county medical society. Be sure to indicate the exact date, time and place of the meeting, subjects according to first choice, second choice and third choice, and the possible attendance.

* * *

The Smoker of Tuesday evening, September 22, being arranged by the Wayne County Medical Society, promises a thousand laughs. The Entertainment Committee is working on plans to insure side-splitting results. Plan on being at this great party. The Detroit physicians working up this show are Dr. M. H. Hoffmann, Chairman; Drs. H. G. Bevington, B. L. Connelly, J. W. Becker, E. W. Fitzgerald, and Frank M. MacKenzie.

* * *

Baseball at Navin Field, Tuesday afternoon, September 22, 1936! Detroit will play St. Louis. If you and/or your wife are interested in attending this baseball game, please drop a postal card to the Executive Office, 2020 Olds Tower, Lansing, and arrangements will be made with the Detroit Baseball Company to secure a block of choice seats for interested members of the M.S.M.S. who are attending the Annual Meeting in Detroit.

* * *

Two Days of Intensive Post Graduate Training—Wednesday, September 23, and Thursday, September 24! Beginning at 9:00 a. m., the physicians attending the 71st Annual Meeting of the Michigan State Medical Society will be busy on these days with clinical sessions at Detroit hospitals and at the headquarters hotel, and with general sessions presenting additional eminent speakers in the afternoons and evenings at the headquarters. Plan on attending. Write for your hotel reservations at once—space is going fast.

* * *

The Michigan State Medical Society's own His-

tory of Medicine in this state should be in the reception room of every Michigan physician. It is the kind of information that is good for your patients. No other group has a brighter record since pioneer days than the medical profession of Michigan. The History is written as interestingly as a novel. The price has been reduced to five dollars for the two volumes. Send order to the Executive Office, 2020 Olds Tower, Lansing, Michigan.

* * *

The new American Medical Directory has been issued. A copy is in the Executive Office of the Michigan State Medical Society. The 1936 edition contains 183,312 names of physicians, located in all the states and territories of the Union, as well as the names of the practitioners of Canada. Information as to any physician's name, address (both office and residence), age, school and date of graduation, date of licensure, and membership in special societies, can be secured by writing 2020 Olds Tower, Lansing. Much other valuable information is contained in the Directory.

* * *

American Board of Obstetrics and Gynecology: The next written examination and review of case histories of Group B applicants by the American Board of Obstetrics and Gynecology will be held in various cities in the United States and Canada, on Saturday, November 7, 1936. Application blanks and booklets of information may be obtained from Dr. Paul Titus, Secretary, 1015 Highland Bldg., Pittsburgh (6), Pennsylvania. Applications for this examination must be filed in the Secretary's Office sixty days prior to the scheduled date of examination.

* * *

By Badge: Admissions to the General Sessions at the 71st Annual Meeting of the Michigan State Medical Society, Book-Cadillac Hotel, Detroit, September 21 to 24, 1936, will be by badge only.

This ruling is made to protect members of the Michigan State Medical Society, who otherwise might be crowded out by others who wish to attend the various functions of the meeting. This rule will apply also to the Smoker, planned by the Wayne County Medical Society for Tuesday, September 22, 8:00 p. m. Monitors will be stationed at all doors to see that this rule is carried out.

* * *

Beware! Michael Erim Brooks, aged forty-eight, pleaded guilty to unlawfully practicing medicine in Toledo, Ohio, on August 6. Newspaper accounts state that though he never studied medicine, the complainant told the court he had prescribed medicine and diagnosed ailments, and had traveled throughout the world. He may visit Michigan next. Be on the lookout.

"Mystic Cures" is a nostrum being sold in Wisconsin by here-today-gone-tomorrow individuals posing as physicians. Notify the Executive Office at once if "Mystic Cures" comes to your community.

* * *

Free parking during the days of the Annual Convention of the Michigan State Medical Society is offered visiting physicians by the Wayne County Medical Society. The Detroit medical group has a large parking lot adjacent to its palatial headquarters at Woodward and Canfield Streets in The Motor City. Just drive in the parking lot and leave your car with the attendants during the period of the Convention.

The clubrooms of the Wayne County Medical Society will also be available to physicians attending the 71st Annual Meeting of the State Society, September 21, 22, 23, 24, 1936. Delicious luncheons are served daily.

The 124 exhibits at the Annual Meeting of the M.S.M.S. in Detroit, September 21, 22, 23, 24—be sure to see them. Thousands of dollars have been spent to arrange these displays. They have something new for you. You can learn something. In the Technical Exhibit, you will find no high-pressure salesmen. They are here to show you the latest advances and progress in scientific equipment. Please show your appreciation of their time, effort and expense by viewing their exhibits carefully. The Fifty-two (52) Scientific Exhibits will cover 4,655 square feet; the seventy-two (72) Technical Exhibits will take up 7,175 square feet, a total of 11,830 square feet of exhibits!

* * *

Hobby Exhibition: If you have a hobby, and you're proud of it, the Hobby Show at the Annual Convention of the M.S.M.S. in Detroit offers you an opportunity to display your avocational work. You are cordially invited to communicate with the Chairman of the Hobby Exhibition, Mrs. Milton D. Vokes, 444 E. Grand Boulevard, Detroit. Send your name, address, number of entries, titles, and descriptions. All exhibits must be in by September 18, 1936. The exhibit itself should be sent to: "Hobby Exhibition, Michigan State Medical Society, Washington Room of Book-Cadillac Hotel, Detroit, c/o John F. Ivory Company." Be sure to notify the Chairman that you are shipping your exhibit. If it is intrinsically valuable, be sure to insure it.

* * *

The Ohio State Medical Association has sent an invitation to the physicians of Michigan to attend the 90th Annual Meeting of the O.S.M.A. in Cleveland, October 7, 8, 9, 1936. The headquarters will be Hotel Cleveland. The sessions and exhibits will be at the Public Auditorium. Outstanding physicians from all parts of the country will be guest speakers at this convention, including Dr. Andrew C. Ivy, Chicago; Dr. Walter E. Dandy, Baltimore; Dr. John R. Caulk, St. Louis; Dr. George M. Lyon, Huntington, W. Va.; Mr. W. H. Drane Lester, U. S. Department of Justice, Washington, D. C.; and Mr. Sigmund Spaeth, New York City. The principal social event of the meeting will be the Annual Banquet on Thursday evening, October 8, at Hotel Cleveland. The seven scientific sections will convene on Friday morning, October 9.

* * *

Correction: We regret the transposition of two lines of the paper entitled "Adrenal Cortical Insufficiency," by Dr. Robert L. Schaefer and Dr. Fred L. Strickroot, which appeared in the August number of this JOURNAL. The correct reading of the second paragraph of this paper is as follows:

"The clinical picture of Addison's disease is characterized by a striking myasthenia with or without cachexia, marked gastro-intestinal symptomatology, pigmentation, and, not infrequently, so-called Addisonian crises. This new form of therapy is capable of relieving the above complex with the exception of the pigmentation, though this, too, when mild, is affected. This publication has the sole intent of adding three indisputable cases of total Addison's disease and two cases of partial Addison's, or partial adrenal cortical insufficiency."

* * *

The Eleventh Annual Clinic of the Highland Park Physicians' Club will be held in the Highland Park General Hospital on December 2. This event has become noted among the medical profession for the high quality of the program. It seems to be increasing in quality as the years go by. The committee are at work early this year and have invited a number of nationally known clinicians and

surgeons to participate in the program. Those who have already accepted are Drs. Dean Lewis of Baltimore; George Crile of Cleveland; A. T. Bedell of Albany, New York; C. A. Aldrich of Chicago; F. F. Tisdale, Toronto; H. L. Krechmer, Chicago; L. J. Harris, Toronto, and Professor Curtis, Columbus, Ohio. Dr. Crile will give an illustrated talk on big game hunting in Africa, at the annual dinner, which will take place in the evening. In the afternoon, Dr. Crile will speak on thyroid surgery.

* * *

The Postgraduate Extension Course of the University of Michigan Department of Postgraduate Medicine and the State Medical Society will begin the week of October 5th. The course will continue for eight weeks, one day each week in the same centers as last year. In addition, a new center will be established at Lansing-Jackson, jointly, to accommodate the physicians in the southeastern portion of the State. The following program has been approved by the State Committee on Postgraduate Education. The first day will be devoted to a clinical pathological conference and a discussion of progressive coronary disease. Other subjects included in the course are allergic diseases, including the skin manifestations; the psychoneuroses, the serum treatment of pneumonia, appendicitis, diseases of the breast, emergency treatment of injuries, and the x-ray and clinical manifestations of ulcerative lesions of gastro-intestinal tract. One day will be occupied with the more common acute and chronic diseases of the ear and eye. The subjects of gynecology and obstetrics, dermatology, and urology will be developed continuously from last year. A program of the course will be mailed shortly to each physician in the State.

* * *

The twenty-first International Assembly of the Inter-State Post-graduate Medical Association of North America, under the presidency of Dr. David Riesman of Philadelphia, Pennsylvania, will be held in the public auditorium of St. Paul, Minnesota, October 12, 13, 14, 15 and 16 with pre-assembly clinics on Saturday, October 10, and post-assembly clinics Saturday, October 17 in the hospitals of St. Paul.

The aim of the program committee with Dr. George Crile as chairman, is to provide for the medical profession of North America an intensive post-graduate course covering the various branches of medical science. The program has been carefully arranged to meet the demands of the general practitioner, as well as the specialist. Extreme care has been given in the selection of the contributors and the subjects of their contributions.

In cooperation with the Minnesota State Medical Association, the Ramsey County Medical Society will be host to the Assembly and has arranged an excellent list of committees who will function throughout the Assembly.

A most hearty invitation is extended to all members of the profession who are in good standing in their State or Provincial Societies to be present and enjoy the hospitality of the medical profession of St. Paul. A registration fee of \$5.00 will admit each member of the medical profession in good standing to all the scientific and clinical sessions.

A list of the distinguished teachers and clinicians who will take part on the program may be found on page XXII.

Special railroad rates will be in effect.

For further information write Dr. W. B. Peck, Managing-Director, Freeport, Illinois.

Michigan's Unemployed Classified: The first figures showing the number of unemployed Michigan people according to general occupational groups were issued recently by Major Howard Starret, State Director of the National Re-employment Service.

The analysis was made of the 180,677 persons seeking work in private industry through the NRS Michigan offices, on July 1, according to Major Starret. Of this number, 95,208 were actually unemployed and most of the remainder were working on WPA and other Federal projects.

A further analysis of the various groups will soon be reported which is expected to be of interest and use to many community groups, Major Starret said. The figures for the total number of 180,677, are:

Craftsmen and skilled, 44,278; physical labor (heavy), 42,258; production workers (mch.), 21,870; production workers (manual), 20,793; household or domestic, 9,609; clerical (non-machine), 9,203; personal service (other), 7,582; maintenance, 5,553; sales (inside), 3,758; students, 3,072; physical labor (light), 2,733; *professional workers*, 2,309; clerical (machine), 1,403; administrators and supervisory workers, 1,365; sales (outside), 1,264; technicians, 1,132; unclassified, 1,082; sales (related service), 960; semi-professional, 295; unemployables, 158.

* * *

Dr. Angus McLean of Detroit was honored by the Italian Government in a letter dated August 13, 1936, from the Royal Italian Vice-Consul. The letter reads as follows: "By instruction of his Excellency the Minister of Foreign Affairs, I have the honor to inform you that His Majesty the King and Emperor has been pleased to bestow upon you His Order of the Crown of Italy with the rank of Commander, in recognition of your constant and friendly attitude towards Italy, and of the splendid services rendered by you to the Italian people and Italian culture."

* * *

The Services of Drs. MacCracken and Stapleton Recognized: The executive faculty of the Wayne University College of Medicine at its first meeting of June 30, 1936, went on record in the following resolutions commending the work of Dr. W. H. MacCracken, former dean of the College of Medicine, and also, Dr. William J. Stapleton, Jr., acting dean. Dr. Stapleton is now associate dean of the college and Dr. MacCracken is head of the Department of Pharmacology.

RESOLVED: The Faculty of Medicine of Wayne University wishes to express its appreciation of Dr. W. H. MacCracken, Professor of Pharmacology and Therapeutics, who served the Medical School as its Dean from 1919 to July 1, 1935, when, because of an untimely illness, he resigned the deanship. During his administration, Dr. MacCracken successfully guided the school through many difficulties. By his leadership the school maintained a Class A ranking among the medical schools of the United States and Canada. This accomplishment is particularly noteworthy in view of the fact that as The Detroit College of Medicine and Surgery, the school was an independent organization, not a part of a university. Dr. MacCracken and his associates, however, recognized that the medical school should be a department of a university, and it was toward this discipline that he aimed. His desire was gratified when the Board of Education, after an interval during which the school was operated as a unit of the public school system, established the Faculty of Medicine as the medical department of Wayne University. This evolution gives the school the distinc-

tion of being one of the few municipally owned medical schools in the world.

Dr. MacCracken's sterling qualities of character, personality, and administrative ability have been largely responsible for these achievements.

The Faculty desires to express these sentiments by formal action and to spread this resolution upon its minutes and extend a copy of the same to Dr. MacCracken.

RESOLVED: In the interval, July 1, 1935, to May 18, 1936, Dr. W. J. Stapleton, Jr., Professor of Jurisprudence, Ethics, and Economics, has served Wayne University College of Medicine as Acting Dean, rendering notable service to the Board of Education, University, Faculty, and Students. The Faculty notes with pleasure that his services as an administrative officer are still available as Associate Dean.

Dr. Stapleton exemplifies those gentlemanly instincts and qualities which are the flower and adornment of our profession.

The Faculty desires to express these sentiments by formal action and to spread this resolution upon its Minutes and extend a copy of the same to Dr. Stapleton.

Summary of Proceedings, 1935

(Continued from Page 616)

14. Authorized the appointment of a Committee to study the medico-legal activities of the Michigan State Medical Society and to recommend action at the next meeting of the House of Delegates (734-735*).

15. By voting to delete the second sentence from sub-section M of Section 7 of Chapter 3 of the By-laws, it made a delegate eligible to election to the general offices of the society (735*).

16. Elected Dr. Perry President-elect of the Michigan State Medical Society; Dr. Louis J. Hirschmann delegate for two years to the American Medical Association; Dr. George Curry, ranking alternate, Dr. Ralph H. Pino, alternate, and Dr. L. F. Foster to fill the unexpired term of Dr. Andrews as alternate delegates to American Medical Association; Dr. J. E. McIntyre as Councilor of the Second District; Dr. George C. Hafford, Councilor of the Third District; Dr. Frederick A. Baker, Councilor of the Fifteenth District; Dr. A. S. Brunk, Councilor of the Sixteenth District, and Dr. F. C. Bandy as Councilor of the Twelfth District for the unexpired term of Dr. Perry; elected Dr. Frank Reeder as Speaker of the House of Delegates, and Dr. Philip Riley as Vice Speaker (743*).

17. Selected Detroit as the place of the next annual meeting (743*).

18. Instructed the Council to employ an executive secretary, not necessarily a physician or a member of the Michigan State Medical Society, who shall act as an assistant secretary and perform such duties as are assigned to him by the Council and the Secretary of the State Medical Society (744*).

19. Had presented to it a proposed amendment to Article 8, Section 2, of the Constitution, to provide for the election of the secretary by the House of Delegates instead of by the Council; and Article 9, Section 3, to provide for the delivery of the invested funds of the society to the Treasurer by the Vice-Secretary; and of Article 9, Section 4, to substitute vice-secretary for secretary, and to fix the amount of the bond (745*).

(These changes in the Constitution are promulgated in order to effect a reorganization of the office of the secretary.)

THIS NEW NIPPLE DEVELOPED BY GROUP OF PEDIATRICIANS

NursRite



THE WRONG WAY

An ordinary nipple operates much as a can with no hole punched for air. Air necessary to relieve vacuum must enter through the same hole, or holes, as milk is drawn.



THE RIGHT WAY

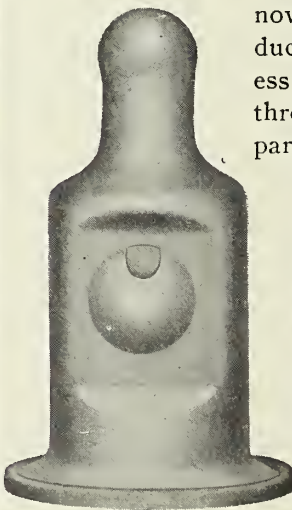
A diaphragm valve in the NursRite Nipple admits air when suction takes place, thereby preventing vacuum from building up, therefore allowing a free, even flow.

"I have used them (NursRite Nipples) where infants were having a tremendous amount of gastro-intestinal distress as a result of swallowing an excess amount of air. I have found these nipples to transform a distressed, upset child into a calm, contented child. I attribute this sudden change to the fact that they were unable to swallow air with these new nipples."

—STATEMENT OF PEDIATRICIAN.

This experience has been confirmed in many instances by nurses and supervisors of maternity wards.

NursRite Nipples are now in quantity production and in process of distribution through drug and department stores.



Physicians, nurses, and hospitals are invited to request samples for trial. Please write.

THE CILOCON CORPORATION

409 Francis Palms Building
DETROIT, MICH.

THE JOURNAL

OF THE

Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. 35

OCTOBER, 1936

No. 10

SOME SIGNIFICANT CONTRIBUTIONS TO THE BASIC SCIENCES MADE IN MICHIGAN*

GROVER C. PENBERTHY, M.D.†
DETROIT, MICHIGAN

The Territorial Medical Society of Michigan was organized at Detroit, January 11, 1820, or one hundred and sixteen years ago. This organization marked the union of the profession in the state and in 1865 the Michigan Medical Society was established by some very illustrious medical men.

Time will not permit a review of the medical activities during the years 1820 to 1865, but these activities are of historical record. Suffice it, that handicapped as was the profession, they were laying a foundation for the future and they contributed liberally to society, both in a civic and professional way.

The foundation sciences of medicine were born, nurtured and developed in Europe while America was still in a transitional stage. These sciences were brought to this new country and in a few decades became the leaven which transformed medical education. It seems fitting at this time to recount the part played by Michigan men in the development of medical education.

Physiology

Two years after the organization of the Territorial Society (1822), Wm. Beaumont, an army surgeon, stationed at Fort Mackinac, now known as Mackinac Island, was brought in contact with a most unusual case. A young Canadian, Alexis St. Martin, was accidentally shot in the abdomen. Beaumont was on the scene within a few minutes, and after a long struggle was able to restore St. Martin to his normal health with the exception that a fistulous opening with a valve-like formation gave entrance to the

stomach through the abdominal wall.

Three years after the accident (1825) the idea occurred to Beaumont that some experimental work in gastric digestion might be done. He describes the situation as follows: "He (St. Martin) will drink a quart of water or eat a dish of soup and thereby removing the dressing I frequently find the stomach inverted to the size and about the shape of a half-blown rose, yet he complains of no pain, and it will return itself or is easily reduced by gentle pressure. When he lies on the opposite side I can look directly into the cavity of the stomach and almost see the processes of digestion. I have frequently suspended flesh, raw and cooked, as well as other substances, into the perforation to ascertain the length of time required to digest each, and at one time used a tent of raw beef instead of lint to stop the orifice and found that in less than five hours it was completely digested off as smooth and as even as if it had been cut with a knife."

For a period of years Doctor Beaumont supported St. Martin and utilized him to study the processes of gastric digestion, and although referred to as a backwoods physiologist the story of his work has been told in brief in almost every textbook on physiolog-

*President's address delivered before the 71st annual meeting of the Michigan State Medical Society, September 23, 1936.

†Dr. Penberthy is a graduate of the Medical School, University of Michigan, 1910. He is Surgeon at Harper Hospital, Detroit; Director, General Surgery, Children's Hospital of Michigan; Associate Surgeon, Herman Kiefer Hospital; Consulting Surgeon, Receiving Hospital; Associate Professor of Surgery, Wayne University College of Medicine; Non-resident Lecturer, University of Michigan Medical School.

ogy since his time. He was the first to make researches on the gastric secretions of men, and his observations were published in 1833.

Physiology was first an appanage of anatomy under C. L. Ford and a laboratory was established in 1877. It was first developed on a modern scientific experimental basis at the University of Michigan by Henry Sewall (1855-1936), who came to the Medical School as Professor of Physiology, 1882. The first laboratory of physiology was established at Breslau in 1824 by Purkinje (1787-1869). From that time on the new science developed rapidly in the European countries, but in America for the next fifty years, if we except the classical work of Beaumont, little or nothing was done to further its progress. The subject was taught from the didactic and quiz standpoint, but laboratories and research were unknown.

A beginning was made H. P. Bowditch (1840-1911), a pupil of Karl Ludwig, who introduced experimental physiology at Harvard in the seventies. The modern era, however, began in 1876 when H. Newell Martin, a pupil of Michael Foster of England, became Professor of Physiology at the new Johns Hopkins University. Young, active and stimulating, Martin inspired those with whom he came into contact. Henry Sewall, a biologist, was his first pupil and assistant. Sewall came to Ann Arbor with the enthusiasm and experimental ability of the real scientist. It was the first time students were able to see and carry out laboratory experiments. Sewall's outstanding contribution while at Michigan was the experimental work on the preventive inoculation of rattlesnake venom, the keystone in the arch of modern immunology. The work was undertaken with the hope that it might form a worthy contribution to the theory of prophylaxis. He assumed that if the immunity from the fatal effects of the snakebite could be secured and arrived at by means of repeated inoculation with doses of the poison too small to produce ill effects, there was reason to expect that the same sort of resistance against germ-disease might follow the inoculation of the appropriate ptomaine, provided that it was through the products of their metabolism that bacteria produce their fatal effects. Pigeons were used in this experimental work to determine if an immunity could be established. Over a period of months Sewall was able finally to show that the prophylactic effect of repeated inocula-

tions was persistent and that the pigeons were uninjured by a fatal dose of the poison and thereafter recovered their powers of resistance against the ill effects of inoculation with doses of venom much in excess of the fatal amount. Although the pigeons were very sensitive, he succeeded in making them withstand doses ten times greater than the minimal lethal dose. Thus it was shown that animals could be immunized from the effects of venom and that they yielded an active antitoxin. Following Sewall's findings, Roux and Yersin showed that the poison generated in diphtheria was similar to snake venom. Von Behring and Roux independently immunized horses to the venom of diphtheria and produced diphtheria antitoxin, an agent which both prevents and cures the disease. A plaque at Ann Arbor reads as follows: "Commemorating the pioneer work of Henry Sewall, Professor of Physiology at the University of Michigan from 1882-1889. His work in immunizing animals against snake venom demonstrated the principle of antitoxin production." Doctor Sewall died in Denver, Colorado, July of this year.

W. H. Howell succeeded Sewall at the University of Michigan as Professor of Physiology in 1890. He did not remain long, as he was called to Harvard in 1892 and from there to Johns Hopkins in 1893. He, however, carried the torch of Sewall, since he had had very much the same training. Howell's Text Book of Physiology published in 1905 was written after a broad experience in laboratory experimental work and was a significant contribution, being used as a standard textbook in many medical schools. Through the work of these and other men, physiology as a distinct and experimental discipline, was implanted into the medical curriculum.

Warren P. Lombard followed Howell and was Professor of Physiology until 1923, when he retired. Lombard received his original training at Leipzig, another of the illustrious group who studied under Karl Ludwig. In addition to being a good teacher he did pioneer experimental work in changes in body weight which led the way to much of our present knowledge of calorimetry. In the work he utilized and gave the first modern application of Sanctorius (1561-1636) method of determining "insensible perspiration" by careful balance studies under various conditions. It is interesting

to note that much of practical value, in the study of modern calorimetry has been brought out through a further application of this method by Benedict of Boston and more recently by Louis H. Newburgh at the University Hospital, Ann Arbor. Lombard's work on capillary pressure in human skin opened a field which occupies a prominent place in the investigation of vascular diseases at the present time. Many other contributions were made by Lombard in his laboratory research.

Pharmacology

The study of drugs was not begun seriously until the close of the eighties. In 1890 John J. Abel became the first Professor of Pharmacology at the University of Michigan. He received his Bachelor of Philosophy degree at the University of Michigan in 1883, and his medical degree at the University of Strassburg. He was well grounded in chemistry with a particular interest in pharmacology. His outstanding contribution was his work on the adrenals. There was a question as to the part played by the adrenals in raising the blood pressure. This work was published after he left Ann Arbor for the chair in Pharmacology at the Johns Hopkins Medical School in 1893. The seed for this contribution to medical science was, however, planted at Ann Arbor.

A. R. Cushny (1866-1926), who succeeded him, was also trained in pharmacology in Strassburg under Schmiedeberg (1838-1921). He held this chair until 1905, when he accepted a call to London and later to Edinburgh. He was a real pharmacologist, not a chemist, and worked to correlate the chemical constituents of material with their pharmacological action. He was one of the first to classify the alkaloids. One of his outstanding contributions to medicine was the publication of the first real textbook of Pharmacology and Therapeutics or the Action of Drugs, which was published in Ann Arbor in 1899. The laboratory developed by these men may truly be said to mark the beginning of the new science in America.

Charles W. Edmunds, the present incumbent of the chair of Pharmacology at the University, has done much to further the pioneer work of Abel and Cushny, particularly in the study of the narcotic problem.

Anatomy

Anatomy in the United States was given in the form of didactic lectures for many

years, illustrated by charts and perhaps by a skeleton. The chair of Anatomy at the University was first filled by Moses Gunn, who later became Professor of Surgery and eventually was called to Rush Medical College. It was in the late eighties, however, that real scientific instruction in gross, topographic and microscopic anatomy began to appear. Today, this country can point with pride to the unexcelled facilities and instruction in anatomy.

J. Playfair McMurrich established a modern anatomical laboratory at the University of Michigan in 1894 and held the chair of Anatomy until 1907, when he was called to the University of Toronto. He was a well trained biologist working in anatomy and his outstanding contribution was on Vertebrate Morphology and Embryology. His textbook, "The Development of the Human Body," was first published in the Anatomical Laboratory at the University of Michigan in 1902. It has been used in a great many medical schools. He was also a collaborator with Sabotta in publishing the Atlas of Human Anatomy. McMurrich was followed by G. L. Streeter, who held the chair until 1914, when he accepted a call to the Carnegie Institute.

G. Carl Huber (1865-1934), who had graduated from the University of Michigan Medical School in 1887, and who in 1914 was Professor of Embryology and Histology, was made Professor of Anatomy, combining the latter with Histology. Huber had worked with Howell in physiology as an assistant and it was while he was in the physiological laboratory that he made his studies on nerve degeneration and regeneration. His work on the development and morphology of the uriniferous tubules is outstanding, as is also his microscopic anatomy of the sympathetic nerves of vertebrates and the degeneration and regeneration of motor and sensory nerve endings. He was a collaborator with Bohm, and Davidoff in publishing a Textbook of Histology in 1904. Prior to his death in 1934 he finished reading the proofs of two volumes on histology and anatomy, recently off the press, in which he was a collaborator, and his contribution represents a life work.

Chemistry

Historically, chemistry came from the medical school. It may also be said that biology and zoology came from the medical school. The first laboratories of chemistry

were established at the University of Michigan 1856. It is of interest to note that the first professors of physiological chemistry were appointed in 1882, R. H. Chittendon at Yale and Victor C. Vaughan at Michigan. In 1887 Vaughan went to the legislature and requested that money be appropriated for a hygienic laboratory. This laboratory was one of the first erected to provide an opportunity for laboratory study in physiological chemistry and bacteriology. It was in this laboratory that the first systematic instruction in bacteriology was given in this country under Frederick G. Novy. The dawn of modern bacteriology came with the classical studies of Pasteur (1822-1895) on fermentation, the first publication appearing in 1857.

Vaughan (1851-1929) received his medical education at the University of Michigan, graduating from medicine in 1878. He was first an instructor in physiological chemistry and later Professor of Hygiene and Physiological Chemistry. It may be of interest to mention that as early as the fall of 1881 in a lecture course on "Sanitary Sciences," given by V. C. Vaughan, among other topics the subject of ferments and disease germs was discussed. Vaughan's outstanding contributions were made in his studies of bacterial toxins; food poisoning; the nucleins; tuberculosis and medico-legal subjects. Vaughan was made Dean of the Medical School in 1891 and held this position until 1921, when he retired. During this period he surrounded himself in the medical school by a group of outstanding teachers. He is often referred to as the father of preventive medicine. We who live today, protected as we are against disease, little appreciate our indebtedness to such men as Vaughan and others.

Moses Gomberg received his Sc.D. degree from the University of Michigan in 1894 and from Heidelberg in 1897. He became an instructor in chemistry at Michigan in 1893, later assistant and junior professor in organic chemistry and professor in 1904. His contributions to organic chemistry have been many and in 1914 was given the Nichols Medal by the Chemical Society. His outstanding contributions as recorded are: his work on the trivalent carbon and free radicals; quino-carbonium salts; tautomerism in triphenyl-methane series; ethylene chlorhydrin. Of late years his contributions have consisted of work on the reactions between

the binary system and the aromatic aldehydes, the reducing actions of organic compounds, spirons with four aromatic radicals on the spiro-carbon atoms; the valence variation and atomic structure and halochromic salts from trioxyl methyl thioglycolic acid.

R. L. Kahn, while working in the laboratory of the Michigan State Board of Health at Lansing in 1925, developed a precipitation test for the diagnosis of syphilis. It has been shown to be equally as sensitive and specific as the Wassermann test. This reaction is unique in several respects. It is the first method that has replaced the Wassermann test in numerous laboratories throughout the world; it is comparatively simple in technic and rapid in its completion, requiring only about forty-five minutes for its performance from the time blood is drawn from the patient. At the conference held by the Health Committee of the League of Nations at Copenhagen in 1928, it was decided that the Kahn reaction, in addition to its specificity, was considerably more sensitive than the average of the different precipitation and Wassermann procedures. The results of the serological conference, similar to that of Copenhagen, held under the auspices of the League of Nations Health Committee, at Montevideo in 1930 gave the same results as those obtained at Copenhagen.

Another outstanding contribution to medical science was made by Edward Clark Davidson (1894-1933), when he first published the results of his laboratory and clinical observations, made in the treatment of burns with tannic acid in 1925. Davidson was graduated in medicine from Johns Hopkins in 1920 and shortly after came to Detroit and was a house officer at the Henry Ford Hospital. It was while he was associated in surgery under R. D. McClure that these studies were made and the first scientific work was done to show the advantages of tannic acid as one of the many important details relating to the care of the burned individual.

The large diffuse burns carried a high mortality but with the introduction of this form of therapy the mortality was lowered and the treatment of the diffuse burn was more or less standardized for the first time. The clinical reports from clinics in various parts of the world also show that their mortality figures have been lowered.

This contribution has not only been a factor in the saving of many lives but it had its effect in stimulating others to perfect methods of technic in the treatment of burns.

Oliver Kamm, Scientific Director of the Parke-Davis Research Laboratories, is known to chemists for his contributions in organic synthetic work and is the author of an extensively used textbook on organic analysis. Synthesis of the well-known anesthetic, butyn, was only one of his medical contributions before being called to Detroit in 1920.

Kamm's separation of posterior pituitary extract into two active principles, the oxytocic and pressor hormones, was an important contribution to endocrinology. Not only did this research feat make the two factors available to the clinician; it was of even greater value in demonstrating for the first time that a single gland could produce multiple hormones, this basic idea stimulating further research, with amazing developments in our knowledge of the anterior pituitary gland.

Kamm has coöperated with Doisy in important studies of estrogenic hormones, and more recently with Marker in synthetic production of theelin, a substance already well known as a female sex hormone but formerly regarded as beyond the reach of synthetic chemistry.

Bacteriology

Frederick G. Novy was graduated from the Medical School of the University of Michigan in 1891. Both before and after graduation he pursued his studies at the Hygienic Institute, Berlin; the Pathological Institute at Prague and the Pasteur Institute at Paris. He was first an assistant in organic chemistry and received his Ph.D.; his thesis was on the chemistry of cocaine. He was later an instructor in hygiene and physiological chemistry and in 1902 was made Professor of Bacteriology and later director of the hygienic laboratory. In 1901 he served on the U. S. Commission to Investigate Bubonic Plague in California. In 1904 he with Vaughan appeared before the Wayne County Medical Society and supported the theory that tuberculosis was caused by the tubercle bacillus. His contributions to chemistry and bacteriology have been many, but outstanding are the following: chemistry of bacteria; the cultivation of anaërobes; a new anaërobic bacillus; eti-

ology of diphtheria, yellow fever, and plague; cultivation of trypanosomes, hematozoa of birds; relapsing fever spirochetes with one carrying his name; filterable virus; anaphylatoxin and anaphylaxis and one of his last contributions, the respiration of bacteria, which work he carried on with M. H. Soule, who succeeded him as Professor of Bacteriology on his retirement in 1935.

Newell S. Ferry, research bacteriologist, also a member of the Parke-Davis research staff, has long been known for his studies of antigens and toxins. In the last few years his demonstration that gonococci and meningococci produce soluble toxins has led to important therapeutic advances. Ferry's most notable contribution is his development of meningococcus antitoxin, an agent which, as shown by Hoyne and others, is a distinct improvement over antimeningococcic serum, and which is materially reducing morbidity and mortality in epidemic cerebrospinal meningitis.

Pathology

Pathology was developed and was far advanced before it became recognized as an entity in this country. The department of pathology was a part of medicine under A. B. Palmer, but upon his death in 1887 an independent chair was created under H. Gibbs and laboratory work was instituted. In 1895 the chair recombined with medicine under George Dock, Professor of Medicine, who encouraged the late Aldred S. Warthin to pursue the study of pathology abroad in the middle nineties. Warthin (1866-1931) received his medical education at the University of Michigan and was graduated in 1891. He served as an assistant in internal medicine and 1892 was made an instructor in pathology and later professor and director of the pathological laboratory, which rank he held until his death May 23, 1931. He had an interesting and forceful personality and as a teacher maintained a high standard, stimulating the student to observe and think for himself. As expressed by Carl V. Weller, now Professor of Pathology, "For Doctor Warthin, pathology illumined the entire field of medicine and his interests were broadly clinical as a result." The titles of his hundreds of published works bespeak his extraordinary energy and industry and the great breadth of his interests. Some of his early contributions were of a clinical nature and he was perhaps best known for his

work on the pathology of syphilis. Warthin's translations and revisions of the tenth and eleventh editions of Ziegler's "General Pathology" and his own "Practical Pathology" and "Autopsy Protocols" have provided useful aids to a long sequence of medical students. In his later years he allowed himself to break away from the concretely practical, to enter the field of the cultural and philosophic aspects of medicine, in which he was more than successful.

Augustus W. Crane was graduated from the medical department of the University of Michigan in 1894. That same year he went to Kalamazoo and entered upon the general practice of medicine. His contributions to the medical literature began in 1895. He is a master of English diction and has contributed liberally in his special subject. In 1897 he installed his first x-ray machine—a twelve inch coil operated by a battery and a mechanical break. The battery he made himself. This was within two years after Wm. Conrad Roentgen (1845-1923) announced his discovery of x-ray.

In 1899 he published in the *Philadelphia Medical Journal* a paper under the title of "Skiascopy of the Respiratory Organs." In 1909 he read a paper before the American Medical Association at Atlantic City on "X-ray Evidence in Gastric Cancer," at which time he made an exhibit of seventy-two gastro-intestinal plates, the first of its

kind to be shown in this country or perhaps in the world.

Time will not permit me to discuss many other contributions that have been made, no doubt, to the Basic Sciences by Michigan men and women. The subject covers a fertile field that history will record. Much of the success of the long line of illustrious men in the clinical branches of medicine may have had its origin in the stimulus of the original work done at their own doorsteps, in the so-called foundation sciences. In this paper it has been my pleasure to uncover and present some of the distinguished contributions made to the Basic Sciences in Michigan.

References

1. American Journal of Röntgenology, 3: No. 9, (Sept.) 1916.
2. American Men of Science, Garrison. New York: The Science Press, 1921.
3. Annals of Internal Medicine, 9: No. 7, (Jan.) 1936. Notes on Medical Education and Medical Institutions in Michigan.
4. Burr, C. B.: Medical History of Michigan. Published by Michigan State Medical Society, 1930.
5. Cyclopedia of Medicine, Vol. VII. Philadelphia: F. A. Davis Company, 1933.
6. Davidson, Edward C.: Tannic acid treatment of burns. Surg., Gynec. & Obst., 41:202, 1925.
7. Dutchess, Charles E.: Personal communication.
8. Kahn, R. L.: Serum Diagnosis of Syphilis by Precipitation. Baltimore: Williams & Wilkins Co., 1925.
9. McKean, Richard M.: Personal communication.
10. Novy, Frederick G.: Personal communication.
11. Novy, Frederick G.: Fifty years' progress in medical education. Nu Sigma Nu: Historic and Biographic: 1882-1932.
12. Reasoner, Col. M. A.: Dr. William Beaumont. Military Surg., 78:389-391, (May) 1936.
13. Sewall, Henry: Experiments on preventive inoculation of rattlesnake venom. Jour. Physiol., 8:203, 1887.
14. Stirling, William: Some Apostles of Physiology. London: Waterlow & Sons, Limited, 1902.
15. Weller, Carl V.: Obituary Aldred Scott Warthin. Arch. Path., 12:276-279, (August) 1931.

UNDULANT FEVER

Brucellosis—Melitensis—Malta Fever—Mediterranean Fever

C. EMERSON VREELAND, M.D.†
DETROIT, MICHIGAN

The disease is characterized by febrile attacks which may persist for weeks or months, and occasionally from three to five years. There are many remittances. It is caused by *Brucella melitensis*, *Brucella suis* and *Brucella abortus*. Malta fever is an ancient disease. Hennan and Davy described a disease in the eighteenth century which was probably malta fever. It was frequently confused with typhoid and malaria. Bruce, in 1886, proved that Malta fever had a specific etiology when he found the micrococcus in the spleen. One year later, he grew the organism on agar, and reproduced the disease in monkeys by inoculation. He obtained the organism from the blood in 1891. Wright and Semple made definite diagnosis from blood agglutination tests in 1897. In 1904, the British Malta fever commission discovered and isolated the germ from goat's

milk; found that goat's milk would frequently agglutinate the micrococcus, and that the infection left the infected human chiefly through the urine.

The disease centers in Malta and all around the Mediterranean. Many cases have been reported from all over Europe

†Dr. Vreeland is a graduate of the University of Chicago Rush College Medical School. He is Gastroenterologist for Grace Hospital, Detroit.

and Asia. In the United States, true melitensis has been reported from California, Texas and Arizona, while B. Suis and B. Abortus have shown increasing numbers of cases from Iowa, Ohio, New York and Michigan.

Brucellosis is primarily a disease of the lower animals communicable to man by contact or by the ingestion of infective material, but probably never or rarely communicated from man to man. More recently, Evans discovered that the Bang bacillus of bovine infectious abortion is closely related to the melitensis micrococcus of Bruce. In the meantime the abortion disease of milk cows has been found extensively in all the States of the Union, and in all countries. Suitable culture media has demonstrated huge numbers of Brucella organisms in the milk of cattle and goats, as well as in their salivary, urinary, and vaginal excretions. These excretions, harboring Brucella organisms, contaminate barns, watering places, and the soil of barn-yards, lanes and pastures. Workmen handling animals may ingest bacteria directly, or inhale infection through dust, since the bacteria may be viable after 70 or 80 days in darkened soil. Veterinarians, farmers, and slaughter-house workmen, may become infected through the skin, nasal-passages and hand-mouth contact through the handling of cattle, hogs, goats, sheep, horses, rabbits and poultry. Laboratory workers frequently contract the disease, while examining blood for other diseases, and instances are known of laboratory workers being infected from handling human blood. A much clearer conception of the possibility of human infection in the United States from animals can be obtained when it is pointed out that 10 per cent of the milk goats have been found positive to the agglutination test and 13 to 16 per cent of the milk cows have given positive reactions. It is also known that animals and human beings may be re-infected, and that there is no life-time immunity to the disease. Without area-control of herds, the farmer has no assurance, after slaughtering his diseased animals, that the neighbor's herds will not lick noses across the boundary fences, and re-infect his herds again.

By far, the greatest source of human infection comes from the use of unpasteurized or improperly pasteurized milk and cream and dairy products such as ice cream, cheeses, etc. The second most common

source of infection comes from direct handling of infected hogs and cattle, alive and slaughtered.

The general public can be given a considerable degree of protection by legally enforced pasteurization of market milk and milk to be used for dairy manufacturers. The pasteurization must be rigidly controlled and maintained at the required standard. The factor of safety is very small since the effective thermal death point of Brucella in milk is very close to the temperature at which cream-line and taste are adversely affected. Anyone familiar with modern commercial competition today knows that superior milk flavor and a deep well demarcated cream-line is more likely to prevail than a higher or more prolonged milk-heating for safety.

May I quote from W. E. Cotton, Superintendent of the Experimental Station, Bureau Animal Industry, U. S. Department of Agriculture, to emphasize the danger of relying on Certified or Grade A milk.

"The tardiness with which the agglutination reactions sometimes appear is a rather serious failing because some infected cattle may become spreaders of large amounts of infection before they can be detected, and the test does not always distinguish between present and past infection. There is grave danger in buying pregnant cattle from infected herds even if they do not react to the blood test because of possible latent infection which has not yet developed to a point that the animal reacts to the blood test."

It is almost impossible for any family to know if the standards set for Certified or Grade A milk are being carried out effectively. Certainly, we can cease buying milk and milk products from the irresponsible back-door and curb-stand dealer.

There is sufficient evidence so far as Brucellosis is concerned to warrant issuing a warning against the consumption of pork and pork-products unless they are thoroughly cooked. Other disease such as trichinosis and tape-worm are conveyed to man by pork, and not necessarily eliminated by meat inspection, so that Brucellosis constitutes only an additional reason for eating thoroughly cooked pork.

The most susceptible age is between six and thirty years, but it may occur at any age. Males seem to predominate in the ratio of about 75 per cent to 25 per cent in

females. The greatest number of cases occur during the summer. The increase begins in April and reaches its maximum during July and August, then gradually declines until February.

Detailed cultural and laboratory differentiation of the *B. Melitensis*, *B. Abortus*, and *B. Suis* have been carefully worked out by Huddleson and others, and cannot receive more than brief mention in this clinical presentation. The organism is pleomorphic, about 0.3 micron diameter. It is described most often as a coccus, but often as a bacillus or coccobacillus. It may be found and cultured from the blood, urine, spleen, liver, lymphatic and salivary glands. There is no proof that flies, mosquitoes, or insects transmit it. The isolation of *Brucella* from human blood can be accomplished with a high degree of success by using a special medium of beef or veal liver infusion bouillon. Further success with this media will be obtained if aerobic conditions, an atmosphere of CO₂, a PH of 6.6 and the proper use of bacteriostatic dyes are used.

The chief diagnostic tests for *Brucella* in man, aside from the clinical findings, are the following.

1. Blood cultures in special media, three to fifteen days after inoculation.

2. Agglutination blood tests (within thirty minutes) (1 to 50 or up to 1-500). An antigen made of an *S.* strain of *B. abortus* is satisfactory for detecting agglutinins produced by all three species of *Brucella*. Plate or tube method.

3. Allergic skin test or intradermal brucellin test. Erythema plus edema [twenty-four hours (1 inch diameter or greater) may last to seventy-two hours] may be accompanied by slight or marked general reaction. Occasional slough of the skin area.

4. Opsono-cytophagic activity of citrated whole blood. These tests, more particularly, the degree of immunity obtained.

Although the classical symptoms of undulant fever have been described by Gentry, Hughes, Hardy, and others, as three clinical types, with two other less distinct types, it seems to me that this may lead to confusion until such time as our diagnostic acumen reaches the point where diagnosis of the severe intermittant and undulatory form and the milder ambulant form are widely recognized. The milder forms are

more often treated for sinus infection, neurasthenia, neuritis, arthritis, myocarditis, et cetera. The sever form may frequently simulate typhoid, malaria, tuberculosis, influenza, bronchitis, cholecystitis, endocarditis, and glandular infection.

Even though the symptoms and physical findings are frequently classical to the more experienced clinician, most of the cases appear vague and mixed. Therefore, it may be said that diagnosis by exclusion of other diseases, will eventually lead to the specific blood agglutination test and the allergic skin tests.

All or a part of the following symptoms gives a true picture of the disease. The onset is gradual, and the predominant characteristic is fever, without clearly evident cause, and without stopping the patient's work. After a few days there may be severe pains in the back and limbs, vertigo and fatigue. Slight bronchitis, heart palpitation, abdominal pains with constipation, diarrhea and distention are frequent. Headache becomes intense and almost continuous. Loss of appetite becomes pronounced. More exhaustion, more severe vertigo and slight chills usually cause the patient to cease work at this point. The patient or physician may take the temperature for the first time, and all are surprised to find it at 102 or 103 degrees, with the pulse around 100. The fever is now continuous in character, going a little higher every few days, and lowering one or two degrees in the morning. After several weeks, the fever declines so that the patient begins to be about again. A few days later a relapse occurs and the fever cycle recurs. Drenching sweats occur more often than with the first febrile attack, and there is a peculiar odor to the perspiration, which to my senses is that of a mouse-nest. In brief, the symptoms are those of septicemia. The relapses may continue as long as the original fever, but as a rule, are shorter. As one relapse follows another, the illness may persist for many months. The temperature then becomes undulating and the patient appears thin, anemic and weak. Many patients persist in their activities while they have the fever, and this aggravates the disease. The symptoms are rarely as severe as the temperature would indicate. The gums are spongy and bleed easily. Insomnia and hysterical manifestations are common. Splenic pain and enlargement is moderate. Superficial

lymph glands are often enlarged and painful. Joints often become swollen and tender, but seldom reddened. The hip, sacroiliac, shoulder, ankle and knee-joints are the most commonly involved. Marked secondary anemia is the rule, with an average reduction of 20 to 40 per cent of red corpuscles and hemoglobin. There is only a slight leukocytosis. The urine seldom contains albumin or granular casts. Slight delirium and mild chills may occur. The blood culture may show brucella anytime during the febrile attacks. The continuous or intermittent fever often leaves the patient prostrated.

When improvement is imminent, the length of the intervals between the febrile attacks gradually increases until recovery takes place. Convalescence has been known to begin within three weeks, but a fair average period is three months.

Mild recurrences of headache, general weakness, vertigo, joint-pains, indigestion and nervousness are likely to take place every few weeks or months during the next three years.

The most common complications are arthritis, glandular enlargement, orchitis, neurasthenia, pneumonia, pleurisy with effusion and cardiac failure.

Some outbreaks of undulant fever have reached a mortality rate of 13 per cent, but the average mortality is between 2 and 4 per cent. A persistent temperature of 104 degrees or above is a bad sign.

Vaccines and serums have had little success in the treatment of the disease. Absolute rest, good nursing, and sponging for temperature is of the very greatest importance. Carbonates, calomel, and phosphates, together with the bile salts laxatives, are best for elimination. Salicylates will control the headaches and muscular pains. Iodex or oil of wintergreen used locally, together with heat application, often relieve tender joints. Todd reports some success with intravenous injection of 22 c.c. of 1 per cent mercurochrome, but the drug is always dangerous in large quantities. Dane and Laffaille report success by intravenous injection of .20 gm. tyroflavine, and repeating the injection only once. Neosalvarsan has been used but with conflicting reports. More recently, Huddleson's filtrate for subcutaneous injection, is being tried out rather extensively, but nothing conclu-

sive can be said about the filtrate at this time.

Immunotransfusion of blood. Donors of immune blood selected by opsonocytophagic index determination as applied by Huddleson.

Test: 5 c.c. of blood added to test tube containing .2 c.c. of a 20 per cent solution of sodium citrate in physiologic solution of sodium chloride.

Test must be completed within one hour from drawing blood.

Into a clean glass vial (as used in the Kahn test) are placed 0.2 c.c. of the whole blood and 0.1 c.c. of a Brucella suspension from a forty-eight-hour liver agar slant. After thorough shaking, the vial is placed in an incubator at 37 (degrees) C for thirty minutes. A drop placed on a glass slide with a capillary pipette, and spread as in the usual blood smear. Dry rapidly. Stain with Hastings or Wright solution. Count number of Brucella in each of twenty-five leukocytes. No ingested Brucella indicates no immunity. A count of from twenty-one to forty bacteria shows moderate immunity. A count of more than forty bacteria counted in each cell shows marked immunity.

Quevli, Christen and Nelson report good results for immune blood transfusion (1932).

S. M. Creswell, and Carl E. Wallace (Tacoma, Wash.) report two cases with excellent results (1933).

Five hundred c.c. of whole unaltered blood was used for transfusion. Temperature dropped within a few hours.

Clinical Cases

This clinical report on undulant fever is unusual in that the cases selected for review involve all the members of one family of five, and one member of a family of two, but both families infected from a common source. There may be other families in America with all members suffering from brucellosis and with positive laboratory diagnosis, but I do not know of them.

The family of F. M. G., living in Detroit, purchased a large farm, thirty-one miles from Detroit, in 1923. Purebred dairy cattle were purchased, all tested negative to tuberculosis and Bang's disease. Purebred sheep were imported from Scotland. There are many surrounding farms about this property, populated with dairy herds, the health status of which is unknown. There were a few abortions in this herd of cattle, but much less than average, and the calf barn was always filled with healthy calves.

It was customary for this family to use pasteurized milk in Detroit, except week-ends and through the summer, when the residence was mostly on the farm.

Many odd and frequent forms of ill health began to involve the family in 1929, chiefly among the

children and Mrs. F. M. G. By 1933, there were so many sicknesses among the children, including respiration infections, anemia, night terrors, gastro-intestinal disorders, threats of chorea, ear and sinus infections, that it was impossible for them to be in school more than half the time. This was extremely odd, in view of the fact that the mother and father were University graduates, and had always supplied a liberal diet of green vegetables, citric fruits, milk, butter, eggs, minerals, and cod liver oil, and in addition looked after exercise and fresh air requirements. The home is modern, with automatic regulated oil heat. It was necessary to withdraw the children from school, and substitute the Baltimore-Calvert School courses in the home during 1933 and 1934. A private tutor came to the home daily during 1935.

On March 20, 1934, Mr. F. M. G. was at his office when he was seized with chills, and marked vertigo. Several days preceding, he had felt utterly exhausted and had had headache and backache. After arriving home it was found that he had a temperature of 102 degrees. Fever continued with remissions each morning of one or two degrees. A hacking cough and precordial pain was accompanied by dyspnea and a rapid pulse. Backache and muscular pains accompanied the fever. Electrocardiograms were made and found normal. Blood count showed a secondary anemia, with slight leukocytosis. Nausea and vomiting occurred several times. Constipation and gas distention were of daily occurrence. Loss of appetite and bad breath were common. Another blood test was negative for malaria, and the Widal test was negative for typhoid and paratyphoid. After a second week of fever, and the temperature now over 103 degrees, the farm was finally thought of, and the agglutination test and blood culture for undulant fever was made. The agglutination was positive at a dilution of 1 to 200 and the blood culture successfully grew the brucella organism. The blood Wassermann and Kahn tests were negative.

Mrs. F. M. G. had had numerous symptoms of ill health every year since 1931. Chief among her symptoms were profuse night sweats, abdominal pains and gas, simulating appendix and gall-bladder attacks, fainting spells, vomiting, headache, backache and joint pains. The temperature ranged from 99.2 to 99.8 degrees. Extreme nervousness, bordering on hysteria and insomnia developed in 1934. There were repeated attacks of sinus infection, with numerous nasal treatments for relief. Exhaustion was pronounced, and the weight decreased from 127 pounds to 116 pounds.

Quite naturally, when the husband was found positive to undulant fever, the wife and three children were tested. Mrs. F. M. G.'s blood agglutinated in a dilution of 1 to 50, and the intradermal skin test showed erythema and edema extending over two inches and lasting for over seventy-two hours.

The three children, Bob, eight years; Dick, five years, and Tom, four years, had all been tested and found negative to the Mantoux tuberculosis test. The intradermal Brucella tests were all strongly positive, with erythema and edema measuring 1.5 inches and not disappearing until the fourth day. In addition to the local reactions, the mother and three children all had systemic chills and aching muscles. Dick had a small local area of necrosis at the site of injection.

In order to save time, and to emphasize the symptoms, complications, physical findings and laboratory tests, I have made a condensed chart of each patient.

A very surprising reaction occurred when the three children were vaccinated for smallpox in November, 1934. They all had violent systemic

upsets and marked local reactions. Two of the oldest boys were in bed for ten days, and encephalitis developed soon after in the oldest boy, which nearly took his life.

Another surprise came in February, 1935, when each of the boys broke out with chicken-pox. All temperatures went to 103 degrees, and they were extremely sick and in bed for four weeks. Whether vaccinations and general infections superimposed on cases of undulant fever always cause violent upsets and complications, I do not know, but I would say that I would avoid any vaccinations of undulant fever patients hereafter. The five-year-old boy developed night terrors and mild chorea after the chicken-pox attack.

In summarizing the course of undulant fever in this family, I would say that Mrs. F. M. G. was probably first infected in 1929, and that the children began in 1932. There was no chance to develop an immunity because with each new infection, more and more of the infected milk was used to build up the general health, each time increasing the opportunity to re-infect with more brucella.

There has been a remarkable change for the better in the health of this family since use of the farm-milk has been discontinued.

When it was determined that all the farm animals were either show-animals or pets of the family, and handled extensively, a competent veterinarian was employed to make a blood test of all cattle, horses, dogs, cats, and part of the sheep, and all reactors slaughtered. The chart shows the results.

CHART I. F. M. G.

Age, forty-six years.

Symptoms.—Fever 101 to 104 degrees. Initial febrile period, ten weeks. Several shorter and milder febrile attacks—99.2 to 100.5 degrees. Weight loss, 26 pounds. Chills. Sweating—profuse. Gastro-intestinal—constipation, gas, tongue coated, slight jaundice. Nervous system—marked insomnia, depression, neuritis, angular pains. *Severe headache*, exhaustion, irritability. Respiratory—*bronchitis*, cough. Joints—*arthritis* (knee, ankle, shoulder, sacro-iliacs). Heart and Circulatory—palpitation, tachycardia, low blood pressure. Eyes—smarting of lids, excessive lachrymation (very viscid consistency). General—poor appetite, weakness, prostration, vertigo. Urinary—negative. Reproductive—negative.

Physical Findings.—Bronchitis. Lymph gland enlargement and soreness, cervical, axillary, groin, mediastinal. Arthritis—sacro-iliacs, lumbar, ankles, knees, hip, shoulder. Spleen—marked enlargement. Liver—moderate enlargement.

Laboratory.—Brucella: Blood culture positive. Blood agglutination positive. Skin intradermal, positive. Wassermann and Kahn, negative. Mantoux test, negative. Typhoid, paratyphoid, malaria, negative. Electrocardiograms, negative. X-ray chest, negative. Urine, negative. Blood count: Hb 78 per cent—R. B. C., 3,900,000, W. B. C. 10,200.

CHART II. MRS. F. M. G.

Age, thirty-seven years.

Symptoms.—Fever—99.2 to 99.8 degrees. Not taken in 1932 and 1933, during time of most symptoms. Weight—loss 9 pounds. Chills. Sweating—profuse, intermittently during 1932, 1933, 1934. Gastro-intestinal—severe dysentery summers of 1932, 1933, 1934. Constipation following vomiting several times, gas distention, abdominal pains. Nervous System—*Headaches severe*, marked insomnia, extreme irritability, depression, trembling. Respiratory—*bronchitis*, severe antrum infections, 1931, 1932, 1933, 1934. Joints—wrist, knee, spine, sacro-iliacs (tender, painful, swollen). Heart and Circulatory—palpitation, tachycardia, extra systole, low blood pres-

sure. Ears—earache, 1934 (no paracentesis). Eyes—smarting, excessive lachrymation. General—poor appetite, vertigo, weakness, prostration, fainting spells. Urinary—frequency at times. Reproductive—negative.

Physical Findings.—Antrum and sinus infections repeatedly. Bronchitis. Arthritis—wrist, knee, sacro-iliacs, spine. Spleen—normal, but not examined prior to 1934. Liver—not enlarged, tender several times during apparent gall-bladder attacks.

Laboratory.—Brucella: Blood agglutination. Positive. Skin intradermal, positive. Wassermann and Kahn, negative. Mantoux skin test, negative. Blood count: Hb. 84 per cent. R. B. C., 4,350,000. W. B. C., 7,200. Urine, negative.

CHART III. R. G.

Age, eight years.

Symptoms.—Fever 101 to 102 degrees for six weeks, in 1934; 99 to 101 degrees for twenty weeks, in 1935; 99 to 100.5 degrees for one to three weeks in 1932 and 1933. Weight—loss ten pounds. Failed to make normal gain. Profuse perspiration. Gastro-intestinal—dysentery, 1932, 1933, 1934. Constipation most times, gas, intestinal pains, repeated vomiting attacks. Nervous system—chorea, 1934; encephalitis, 1935 for six months in bed, irrational, severe headaches, photophobia, whispered speech, incoordination of muscles and muscular weakness, uncontrolled crying spells. Respiratory—bronchitis repeatedly, antrum infections. Joints—all joints and muscles (pain and tenderness) neck and back. Heart and Circulatory—palpitation, tachycardia. Eyes—smarting, excessive lachrymation, mild conjunctivitis. Ears—otitis media and paracentesis, 22 times. Antrum infections yearly. General—poor appetite; exhaustion and weakness. Urinary, negative.

Physical Findings.—Bronchitis—severe each winter, 1933, 1934, 1935. Lymph glands—cervical, axillary, tender, swollen and enlarged. Arthritis—practically all joints and muscles involved. Spleen—enlarged. Liver—not palpable.

Laboratory.—Brucella: skin intradermal, positive seventy-two hours. Culture and agglutination not made. Wassermann and Kahn, negative. Mantoux test negative. Typhoid and paratyphoid, negative. X-ray chest—negative except enlarged mediastinal glands. Blood count—Hb. 72 per cent. R. B. C. 3,210,000. W. B. C. 11,300. Urine, negative.

CHART IV. D. G.

Age, five years.

Symptoms.—Fever—100.6 to 101 degrees for three weeks, then intermittent fifteen weeks, 99 to 100 degrees. Weight—loss six pounds. Failed to make normal gain. Chills. Sweating—profuse for three weeks. Gastro-intestinal—dysentery, summer 1933; constipation and gas since. Vomiting with dysentery, abdominal pains.

Nervous system—marked irritability, eye squinting, muscular twitching like mild chorea, night terrors several weeks. Respiratory—bronchitis, 1933, 1934. Head colds. Joints—ankle joints painful and tender, muscular pains. Heart and Circulatory—palpitation. Eyes and Ears—otitis media (paracentesis three times). Smarting eyes. General—weakness, poor appetite, vertigo. Urinary, negative.

Physical Findings.—Bronchitis. Lymph gland enlargement and tenderness, cervical and axillary. Arthritis—ankle joints tender. Spleen—marked enlargement. Liver—moderate enlargement.

Laboratory.—Brucella: Skin intradermal positive, seventy-two hours. Culture and agglutination not made. Mantoux test, negative. X-ray chest, negative. Blood count: Hb. 85 per cent. R. B. C. 4,400,000. W. B. C. 7,800. Urine, negative.

CHART V. T. G.

Age, four years.

Symptoms.—Fever—103 to 104 degrees for three weeks, then undulating, twelve weeks, 99.5 to 101 degrees. Weight—loss in first febrile attack, quickly regained. Sweating—profuse for three weeks. Gastro-intestinal—dysentery summer 1933, gas and abdominal pains. Constipation moderate since. Nervous system—irritable, dreams, and insomnia. Respiratory—bronchitis, head colds. Joints—minor pains in muscles and joints. Heart and circulatory—palpitation. Eyes—smarting, moderate conjunctivitis, lachrymation. Ears—otitis media (paracentesis once). General—weakness, variable appetite. Urinary—negative.

Physical Findings.—Bronchitis. Lymph gland—enlargement and tenderness, marked cervical involvement. Arthritis—slight. Spleen—not enlarged. Liver not enlarged.

Laboratory.—Brucella: Skin intradermal positive seventy-two hours. Systemic reaction. Blood culture and agglutination tests not made. Mantoux test—negative. X-ray chest—negative. Blood count: Hb. 89 per cent. R. B. C. 4,860,000. W. B. C. 7,200. Urine, negative.

CHART VI. A. B.

Age, fifty-seven years.

Symptoms.—Fever 99.4 to 101 degrees—Intermittent. Chills. Sweating—moderate. Gastro-intestinal constipation, dysentery several attacks, hyperacidity, gall-bladder attacks. Nervous system—irritability, marked insomnia, neuritis. Heart and circulatory—palpitation. Respiratory—negative. Joints—severe arthritis—knees and ankles (tender, hot and swollen) shoulder—back. *Note:* The arthritis forced this fifty-seven-year-old farmer to retire. Eyes—smarting of lids. General—weakness, vertigo. Urinary—negative.

Physical findings.—Arthritis—knees, ankles, back (severe). Spleen—normal. Liver—moderate enlargement.

Laboratory.—Brucella: Blood agglutination positive. Skin intradermal positive. Wassermann and Kahn—negative. X-ray—Gastro-intestinal tract normal. Gall-bladder, poor filling. Urine—negative.

CHART VII. AGGLUTINATION TEST—ANIMALS FROM INFECTED FARM

108 Dairy cattle tested.....Reactors No. 18
Percentage 16.6 per cent—infected
10 Sheep (2 per cent of 500 flock).....Reactors none
7 Horses (total on farm).....Reactors none
3 Cats (50 per cent on farm)....Reactors none
1 Dog (total on farm).....Reactors none
Swine—None on farm

Note: Of the eighteen cattle reacting positively, there were thirteen coming from four cow families.

Noble Fauvic family.....	4
Bright Blonde family.....	3
Rejanita Wayne family.....	3
Jane Pride family.....	3
There were also twenty-seven cattle from four cow families, in which every member escaped infection.	
Lady Ormsby family.....	10
Ambassador Della family.....	6
Creator Rue family.....	4
Phroso family.....	7

This brings up the question of whether certain families of cattle have a natural or acquired immunity to Brucella, and if so, does this apply to human families? Also, are some families more susceptible?

DISEASES OF THE KIDNEY: DIFFERENTIAL DIAGNOSIS

ROBERT E. CUMMING, M.D.†
DETROIT, MICHIGAN

The human kidney is a vital organ significant enough to allow the development of a great surgical specialty in the past 25 years known as Urology. It is well, then, to take stock of our present knowledge with regard to kidney disease in general, and to relegate boldly to oblivion any older ideas now known to be impractical or incorrect. Classifications of kidney disease must take into consideration the fundamental idea that any organ is an integral part of a whole organism; so kidney disease must be studied in its relationship to the entire human anatomy and physiology.

It is not expedient to include, in this presentation, a discussion of nephritis, or of the nephroses. These are so-called medical diseases, and as such have an entirely different meaning from the surgical diseases of the kidneys. True, the urologist must, many times, render an opinion based upon differentiation from other types of renal involvement, and it behooves us to be familiar with the various forms of nephritis and nephroses, and to be able to clarify—in a given instance—the individual kidney lesion. This is particularly true if, as often occurs, remote infection is the prime factor in bringing about renal damage. At present it is conceded that many nephritides are the late result of infection, and, indeed—if one recalls the association of nephritis with scarlet fever—a time-worn illustration of this point is at hand. There is much yet to be learned about all kidney diseases, and the alleged “cure” of nephritis, recently touted in the press, is possibly a fallacious one—yet it points to the fact that everywhere scientific men are constantly working and thinking along these lines. For some years, brilliant work in nephritis and nephrosis has been in progress at Ann Arbor and has already produced much of value.

Turning to primary kidney lesions and abnormalities which bring about disease and impaired function, let us accumulate a brief list of the conditions which we may encounter.

TABLE I. CLASSIFICATION OF RENAL DISEASES
(Excluding nephritis)

1. Inflammatory (Based on infection)
2. Anomalies
3. Nephrolithiasis
4. Neoplasms

†Dr. Robert E. Cumming is a graduate of the College of Physicians and Surgeons, Columbia University, 1917. He has practiced Urology in Detroit since 1921. On Surgical Staffs of Detroit Receiving, Grace, St. Joseph's Mercy and C. G. Jennings Hospitals. [The article concerning diagnosis of Kidney Disease was presented in the form of a lecture in the University of Michigan Post-graduate Course in Urology.]

Why are the changes resulting from infection in the kidney, or those brought about by anomalies, calculi, or tumors of such great significance? It is not only because the kidney is a vital organ, but because of the specific manner in which its physiological activity is influenced by these changes. Let us realize that the kidney has a dual function: First, that of excretion of soluble metabolic waste products. Second, the transportation of these waste products to the reservoir provided by nature, where they can be retained until convenience allows their disposal. Since the kidney is a closely-knit substantial tissue mass easily affected by minor interferences with this physiological activity, it is easy to conceive how simple gross volume changes may play havoc from a physical standpoint.

Further, this essentially tubular organ is lined by a sensitive mucosa which is, in turn, surrounded by several layers of muscle which take care of peristalsis and anti-peristalsis in disease just as one would expect a muscular tube to do. In addition, there are sensory as well as motor nerves located in the renal capsule, its pedicle, and along the ureter, giving rise to pain which is both primary and reflex in type, and which often is a flag of danger, though most confusing at times. The urine is not propelled by means of gravity, nor from pressure within the kidney substance; nor is its movement dependent primarily upon the systemic blood pressure. Therefore, smooth transportation can occur only when the line is clear and when the propelling contractions are right, both as to intensity and direction. One may correctly compare the transportation of urine to that of the fecal stream.

Diseases of the kidney, then, are almost invariably associated with dysfunction; hence the value of separate kidney function

tests, which often measure not only the degree of secretory inefficiency but also that of transportation failure. One must not think of kidney *drainage*, unless there is an artificial contact established as by means of a drainage tube or an ureteral catheter.

Just as anatomical and physiological considerations are important, so the gross and microscopic changes brought about by disease or anomaly must enter into an understanding of dysfunction. Correlation of pathology with functional disturbances is much easier if one remembers basic anatomy and physiology. The best clinician and the best surgeon is that one who can picture in his own mind the actual state of the parts which he is going to treat.

The following table depicts, in general terminology, those conditions which we commonly encounter in kidney disease; certain explanatory and etiological notes are added for clarity. We do not use the term "Pyelitis," because it is a misnomer in the light of known facts of early kidney disease. Pyelonephritis is the more accurate designation.

TABLE II. KIDNEY DISEASE PROCESSES
(Based on dysfunction)

1. Inflammatory (Infection)
 - a. Pyelonephritis (Pyelectasis)
 - b. Pyonephrosis
 - c. Focal {
 - (Cortical)
 - (Medullary)
 - (Pelvic)
2. Hydronephrosis: (Sterile or Infected)
 - a. Congenital; causes: Anomalous vessel—Ptosis—Neurogenic etiology.
 - b. Acquired; causes: Stricture—Stone—Spasm
Extra-renal pressure, as tumor, pregnancy, Tbc. glands.

Inflammatory lesions in the kidney, based upon infection, are due to a variety of organisms.

TABLE III. PATHOGENIC ORGANISMS
(Infecting agents responsible for urinary tract infections)

1. Specific Strains: Neisseria Gonorrhea, Mycobacterium tuberculosis, Hyphomycetes (Pathogenic moulds), Blastomycetes (Pathogenic Yeasts), Trichobacteria (Actinomyces, etc.), Treponema pallidum.
2. Aspecific Strains: (Frequently mixed or possibly admixed to Specific Strains) Escherichia (Coli), Eberthella (Typhoid), Salmonella (Paratyphoid) groups. Staphylococcus and Streptococcus groups.
(Escherichia group causes 80 per cent of all these infections. Recognition of Bacterial Mutation important.)

The route of access by which organisms reach the kidney is of importance, because recognition of it aids in accurate diagnosis and correct treatment. Three routes are

accepted, some organisms choosing one more frequently than others. The hematogenous route is the most important, the lymphatic probably the least so, while the ascending route can be most easily connected with associated disease such as obstruction at the bladder neck, bladder paralysis and adnexal pathology.

It is not necessary to define the clinical entities recorded in Table II. Pyelonephritis may be recognized in its acute form, or go unrecognized until it has become chronic. The acute type is usually characterized by sharp fever with daily remissions, persistent loin pain, leukocytosis (which varies according to the degree of systemic absorption and the patient's general state of health as well as his age) and pyuria, accompanied often by transient hematuria. Physical examination discloses local or generalized tenderness in the flank, extending to the abdomen. The pain may radiate along the course of the ureter. If the fever persists and remissions do not occur, one must suspect a progression of the process to that of pyonephrosis. The intermittent finding of pus in the urine is suggestive of temporary phases of cessation of peristalsis or an occluded ureter, so that a foundation of ptosis or associated hydronephrosis must be considered. This disease tends to recur, and usually does so if secondary to permanent changes in the kidney involved, and if there is a persistent extrarenal focus of infection. Pyelonephritis is frequently a common sequence of periods of bowel stasis in children and of acute upper respiratory infections in both children and adults. Preventive treatment naturally lies in the eradication and prevention of the causative disease, wherever it exists.

There are so many phases of a pyonephrosis that one cannot briefly describe the disease. Preceding pyelonephritis should be recognized from the history of a given patient. Also, any disease of the lower genital or urinary tract parts should be given consideration as of antecedent importance. Gonorrheal pyonephrosis is not so rare as is generally believed, and the ascension of infecting agents has already been mentioned. Persistent pain, or none at all; fever, or none at all; pyuria, usually but not always persistent; possibly leukocytosis; a palpable mass, or no determinable enlargement of the kidney—these are the confusing signs of pyonephrosis. Even in renal tuberculo-

sis, one kidney may go on to complete destruction with few typical symptoms and no conclusive findings.

Many of the generalities mentioned in connection with pyonephrosis apply to hydronephrosis in its various types and degrees. If infected, certain rather obvious signs will appear; if uninfected, a gradual loss of renal function (especially if the process is bilateral) may constitute the entire picture. If infection is present, the symptoms and findings are more or less identical with those of pyonephrosis; indeed, an infected hydronephrosis is to all intents and purposes closely akin to pyonephrosis. Acute symptoms from hydronephrosis are the result of sudden interference with an already faulty peristaltic state, and are usually due to sudden halting of the urinary stream from the involved kidney. The so-called Dietl's crisis occurs when the kidney capsule is stretched to a point causing acute pressure. Kidney function in hydronephrosis is preserved to a remarkable degree and over long periods, due to the ability of the renal blood to reabsorb water from the tubules, thereby preventing distention to a point where a total lack of function must follow.

Focal lesions in the kidney, which include early tuberculosis and "carbuncle," and processes which extend beyond the kidney producing perirenal inflammations and abscesses, are almost invariably associated with a hematogenous infection—the primary focus being recognizable in most cases. The symptoms of perirenal inflammation and suppuration are acute and perhaps the most typical of any kidney lesion. Severe and definitely localized pain, persistent fever, rising white count, and an absence of pus in the urine, though red blood cells may appear, constitute a picture which is not ordinarily confusing. Knowledge of preceding renal disease on the side involved may help a great deal in clarifying the diagnosis. The most classical symptom is local, exquisite tenderness in the costovertebral angle. There is a benign type of perirenal abscess producing few signs until a mass appears.

Urography has an all-important rôle in the diagnosis of these conditions. Each one produces more or less typical images, and each demonstrates certain types and degrees of dysfunction. The trained urologist and the trained roentgenologist must, of neces-

sity, be consulted for correct evaluation of all urographic films. Next to the cystoscope only, in importance, the Roentgen ray has advanced the knowledge of physiology and pathology in the urinary tract to a point making urology one of the most exact medical and surgical sciences. Many times it affords the best, the safest and simplest method in a diagnostic search; rarely, however, does it suffice alone—since renal function, type of infection, and individual study of the two kidneys in a given patient are of paramount importance.

The common symptoms encountered in diseases of the kidney are shown in Table IV. Anuria is of three types: Pre-renal, renal and post-renal. The first implies the absence of secretory activity, and develops in nephritis as the result of overwhelming poisons. Renal anuria is that state found when the urine is prevented from escaping the kidney or the kidney pelvis. Post-renal anuria occurs when the kidney and kidney pelvis are themselves sound, but the urine is retained due to obstruction in the ureter. This term is sometimes used, though incorrectly, in instances of bladder retention. Pyuria and hematuria are self-defining and, for recognition, require only the use of a microscope. One should not discover these signs merely by gross inspection of the urine. Their significance is manifold, and their discovery simply a key to open up real investigative procedures.

TABLE IV. SYMPTOMS

Anuria
Fever
Pyuria
Leukocytosis
Hematuria
Muscle Spasm
Renal and Ureteral Pain

Fever, leukocytosis, and muscle spasm, the latter always associated to some degree with pain, vary with the changes in conductivity of the urine. A severe infection benefited by good pelvic and ureteral peristalsis and little, if any, retention of infected urine, may be self-limited. In this event, the fever and the increased leukocytosis may be so transitory as not to be discovered. Pain may be surprisingly absent or mild because of failure of the infection to produce tension in the area involved or the adjacent kidney tissue. On the other hand, renal pain is of great importance in many, many instances—as is pain along the ureter.

The radiation of pain from a blocked pelvis or ureter is described in the oldest treatises on medicine and surgery. Table V was prepared to suggest those conditions producing pain, with which renal and ureteral pain may be confused.

TABLE V.

Renal pain often confused with:

1. Gastro intestinal tract pain (generalized)
2. Peptic ulcer pain
3. Appendicitis pain (colon)
4. Pleural pain
5. Intercostal neuralgic pain
6. Low backache
7. Nerve pain (herpes zoster)
- (Renal and ureteral pain closely allied)
8. Pelvic inflammatory pain

Table VI was designed to remind us of certain general rules one may follow in evaluating renal pain.

TABLE VI. RENAL PAIN

1. Sharp, acute pain usually indicates an acute lesion.
2. Dull, aching pain usually due to chronic lesion.
3. Many lesions give typical pain. Stag-horn calculi, often no pain. (*Symptoms and Pain are due to interference with physiology, not to the disease, per se.*)

The etiological items shown in Table II, in connection with hydronephrosis, may en-

ter into all clinical pictures of infection, in any of its stages. So, also, the various anomalies may complicate any instance of kidney disease. One must not forget the relative frequency of congenital single kidney, hypoplastic kidney, pelvic kidney, unilateral fused kidney, horseshoe kidney, solitary cystic kidney, and congenital polycystic kidney (always bilateral). Upon any of these infection may be an additional calamity, and one must be on guard—else he will come to grief in surgical treatment. For these conglomerate entities, a complete urological examination is almost imperative, and the most interesting roentgenograms are often those obtained in the study of anomalies. Renal tumors constitute another group of diseases which may produce any or all of the symptoms described, either of themselves or due to associated infection, ptosis, or anomaly.

Summary

A series of six tables are included with a brief, general discussion of diagnosis in Kidney Disease; these are offered for ready reference, and should aid in differentiation of the urological conditions one regularly encounters.

A STUDY OF EPILEPSY IN DETROIT

A Preliminary Report

O. P. KIMBALL, A.M., M.D.†
CLEVELAND, OHIO

and

DON W. GUDAKUNST, M.D.‡
DETROIT, MICHIGAN

The Detroit Board of Education and Department of Health have conducted a study of epilepsy in school children for the past two years. The need for individual study and special school work was recognized for several years but it was not until June, 1934, that this particular study was organized. It includes a study of the cause and treatment of the disease and an attempt to give the child an opportunity for school and normal social life.

In June, 1934, a survey was begun of five hundred fourteen cases known to the Board of Education. The children had either been excluded from school or were having difficulty to stay in school because

of epileptic seizures. A nurse from the Division of School Health Service of the Department of Health visited the homes of these various children. A brief history was obtained in each case, giving information as to the types of seizure, the date of onset, present condition, and the kind and amount of medical care being received at the time.

†O. P. Kimball, A.M., M.D., Cleveland, Ohio, is a graduate of the Western Reserve University, 1918. He has contributed extensively to the prevention of goiter. He is in charge of special research for the Detroit Board of Education.

‡Don W. Gudakunst, B.S., M.D., is a graduate of University of Michigan Medical School, 1919. He is Deputy Commissioner and Director of School Health Service of the Detroit Department of Health. He is lecturer at Wayne University.

It was obvious from this history that in a number of cases there was nothing suggestive of epilepsy; others were receiving competent medical care from their own physicians or clinics of the city. Two hundred fifty-nine were referred to us for study. One hundred ninety-two of these were diagnosed as idiopathic epilepsy with no apparent etiological factor except the hereditary one manifested. Of this number one hundred and six were designed for further study and treatment. They were selected because of complete absence of evidence of brain injury of a traumatic or infectious nature and on the basis of having frequent and severe seizures. In addition the cooperation of the child's family was at times a deciding factor.

These one hundred six were placed under a specialized form of treatment consisting of a daily intramuscular injection of two (2) c.c. of a 10 per cent concentration in liquid form of lipoids from sheep brain. The material was prepared and supplied for the purpose of the study by Parke Davis Company Laboratories. This form of treatment was suggested by the earlier work of Choroshko of the Metchnikoff Institute in 1924 (one), Milyzen in 1925 (two), and Stawrowskaja in 1929 (two). These workers reported definite improvement in seizures both as to severity and number of attacks. They reported no untoward results in any case. This type of treatment seems also to have been suggested to other workers based upon observation made in giving Pasteur treatment to epileptic children. In certain instances the nature of the epilepsy attacks were definitely altered for the better.

Prior to the work in Detroit, Kimball had applied this form of treatment to thirty-two cases (twenty-four children and eight adults) in Cleveland. Of this number eight have been free from all seizures for a period of four years. An additional twelve, who are still under observation are reported by him as definitely improved. Twelve of the series showed no alteration in their clinical course.

One course of treatment consisted of five injections weekly for six weeks, or a total of thirty injections. A rest period of about one month was then allowed and the course repeated. At no time were there any severe reactions, either local or general. There has been a slight local reaction following the first few injections which has disappeared

in each case after two or three days. This reaction occurs in about 10 per cent of the cases.

The following table gives the results of two years observation of these cases with the amount of treatment given, together with the results obtained:

Condition	Number	Per cent	Average No. treatments
Apparently cured...	13	12.3	53
Definitely improved	54	50.9	80
No improvement...	39	36.8	90
Total	106	100.0	—

In fifty-one cases treatment was started but was later discontinued because we recognized that we were dealing with brain injury instead of epilepsy.

Thirteen of the group classed as "free from seizures" have been without seizures for periods ranging from twelve to eighteen months. Eleven have been returned to regular schools where they are carrying on their work without any attention other than a visit to the clinic every month.

It has been observed in approximately one-fourth of the cases that shortly after the starting of the preliminary course of treatment there is a definite increase in the frequency and severity of the seizures. This phenomenon is usually manifested at about the end of the first week, but is of only a few days duration and is usually followed by a marked improvement. The time lapsing between the starting of treatment and the noting of improvement varies greatly. In a few cases an immediate improvement was noted; in others, treatment had to be carried out for a year before definite change was noted. We have set this period as a limit of treatment before classifying a case as resistant. Stawrowskaja, however, set two years as a minimum period before discharging a patient as refractory to this treatment. During the first year of this study five of the patients who were under observation died from epilepsy. This, however was expected since a study of the vital statistics records of the Department of Health for a ten year period preceding this study showed a total of one hundred and eighty-six deaths from epilepsy. Of this number one hundred seventeen were children or young adults.

In our study two of the deaths occurred in children who had been treated, but were at the time of death having their rest period.

In one other case death occurred immediately after treatment had been started, but the clinical picture and the type of seizure was in no way different from those experienced every six to eight weeks during the previous six years. The patient went into status epilepticus and did not recover. Two of the cases were under observation, but had not been treated. While considering the possibility of harm, it is to be remembered that frequently evidence of brain hemorrhage following a severe convulsion is seen. This condition has long been known and bears no relation to any treatment. The result of such an injury varies greatly from a slight paresis with a mental change frequently expressed by a stupor lasting for three to four weeks, to a fatal brain hemorrhage. It is important that this natural hazard be carefully explained to the parent lest an accident should happen following an injection and the treatment be blamed.

At the start of the work all treatments were given in a clinic set up in a centrally located school. However, it was soon observed that the maximum benefit to the children could not be secured in this manner. Because of this the Board of Education established a special observation school for both treatment and study of the children who had been excluded from regular classes because of the severity of their illness. Children are collected from all parts of Detroit by motor bus. During the first year of operation this school was operated as a "residence" school for boys only, the girls continuing to receive their treatments at the central clinic. The pupils were taken to school on Monday morning and returned to their homes Friday evening. During the week the school maintained its staff of teachers and one nurse in attendance the full twenty-four hours of the day.

No special diet was prescribed for the patients; but rather a simple well balanced diet was given all. Every effort was made to discourage the use of all forms of sedation. The barbiturates, especially phenobarbital were placed under ban, except where the child was taking it on orders of his private physician. A number of cases came to us actually toxic from the large amounts of phenobarbital that had been taken, as much as six grains having been taken daily for many months at a time. This amount seems to produce a stupor from

which it takes months to completely recover. It was found in certain cases that what appeared to be withdrawal symptoms were caused by the complete and sudden cessation of this type of medication. It was necessary to withdraw the drug gradually in these instances. In none of the cases did the large amount of medication definitely alter the clinical course of the disease. Seizures occurred at the same rate and with the same severity both with and without the drug. In our opinion phenobarbital is indicated only in special instances in the management of epilepsy and then only for a short period of time. Our observations convinced us that large dosage taken continuously over long periods may actually be harmful to the health of the user.

From the beginning of this study special attention was devoted to investigation of the child's family history in order to determine the incidence of a definite hereditary factor in the disease. A simple statement on the part of the parent that no similar attacks had ever been experienced by either the father or mother was not accepted. It was insisted that at least three generations be reviewed in this respect. In certain instances treatment was withheld until a complete history was obtained. Because of the nature of the disease and the stigma attached in the minds of most people it was a common experience to have perfectly frank known cases covered up until such thorough investigations had been completed. In many instances this type of investigation necessitated correspondence with relatives in Europe or distant cities in this country. In the records completed for over three hundred children with the so-called idiopathic epilepsy a definite familial history was shown to exist in 57 per cent of all cases. In 25 per cent the family history was not known, and in only 18 per cent could it be said with any authority that there was no history of epilepsy in the last three generations. From the diagnostic point of view this hereditary factor is often the most important finding for differentiating idiopathic epilepsy from neuro-pathologic conditions presenting similar clinical symptoms.

The school of observation has been of even greater importance than was at first anticipated. First the common belief that a group of epileptics would have a tendency to have more seizures if kept together was found to be false. For six months there

were forty boys together from Monday morning to Friday evening and they had 50 per cent fewer seizures per day at school than they had at home. Exactly the same was true this year with the group of girls. Since making this observation study of home conditions has been conducted to learn the causative factors. We are now teaching the parents as well as the children how to live in order to avoid as many seizures as possible. In the talks to parents emphasis is placed on a simple diet, regular out of door recreation avoiding strenuous or dangerous exercise, regular habits of eating and sleeping, proper elimination, normal social habits, and avoidance of excitement and worry.

Daily observation made on these children in school over a period of weeks or months is of more value in determining their future, both as to treatment and possible education, than any clinical study or hospitalization can ever be. Also, the school of observation has definitely shown that these children can be in school and far the majority are physically better off in school than they would be at home unemployed.

The type of education is very important. The very nature of this disease will prevent them from ever making use of the ordinary education. We must plan a very specialized course for these children if they are to make practical application of their schooling.

The scope of this work and the need for such a school can be seen in the fact that in two years we have made contact with over six hundred families where one or more children are having seizures of some nature.

Case Histories

Case 1.—F. S., a male, aged fourteen. The first epileptic convulsions were noted at the age of seven. At the age of eleven he was hospitalized after a particularly severe seizure. He was unconscious for thirty-eight days and unable to talk for an additional period of two weeks. The clinical diagnosis was cerebral hemorrhage from convulsions. After this period there was no apparent change in the type or severity of convulsions, averaging about fourteen attacks per month until treatment was started. There is a definite history of similar convulsions in his family.

Lipoid injections were started September 27, 1934. There were five hard convulsions during the first ten days of treatment. During the first three months of treatment there were fifteen seizures. There were but five during the next six months. The last seizure occurred on June 10, 1935. Medication was discontinued on that date. This boy was returned to regular school in April, 1936, apparently free from epileptic symptoms.

Case 2.—R. W., a male, aged twelve. The first epileptic seizure of record or note occurred in February, 1933. In January, 1934, he was admitted

to the University of Michigan Hospital for study and diagnosis. Following two series of encephalograms a diagnosis of essential epilepsy was made. The family history showed epilepsy on both sides with the addition of definite feeble-mindedness on one side.

At the time of starting lipoid injection treatment, on June 28, 1934, this boy was on home teaching and was being given two grains of luminal daily. He was having one severe seizure a week. From July 5 to July 24, 1934, there were four severe convulsions. Treatment was continued until August 1934 during which time there were forty injections without a rest period. During the rest period there were three convulsions, the last being on September 17, 1934. Treatment was resumed on October 25, 1934, and continued to December 7, 1934. He was free from seizures until January 8, 1935, when he fell on the ice and struck his head severe enough to render him unconscious for twenty minutes. The following day there was a convulsion and one daily for a week. Treatment was started again. There were five seizures during February, March, and April with the last being on April 15, 1935. Treatment was discontinued on April 30, 1935. There have been no convulsions since that date and the boy was returned to regular school on January 1, 1936, apparently perfectly normal.

Case 3.—B. L., a female, aged thirteen. Convulsions started at the age of eleven. They were of the nocturnal type occurring about once a month. These were in no manner associated with the menstrual cycle. There were two or three petit mal type of seizures daily but these were never severe enough to warrant exclusion from school. The family history was entirely negative for any epilepsy for at least three generations on both sides.

At the time of starting treatment on August 21, 1934, this girl was taking the so-called Converse treatment which had in no way lessened the frequency or severity of her seizures. Injections were continued until October 10, 1934, for a total of thirty injections. During September, 1934, there were numerous light attacks with loss of consciousness but no convulsive seizures. Since October 1, 1934, there have been no seizures of any kind. The course of treatment was not repeated. During the past year this child has been doing outstanding work in her regular grade.

Conclusions

The injection of lipoids of brain tissue was followed by beneficial results in 63 per cent of cases of epilepsy with cessation of seizures in 12 per cent of cases.

A special school conducted by the board of education is a rational method of education and socialization of the epileptic child. Such a school has afforded an excellent opportunity for establishing an accurate diagnosis and prognosis.

The hereditary factor in epilepsy appeared to be much higher than ordinarily reported.

Phenobarbital is of limited value in the treatment of epilepsy. The continuous use of large doses is detrimental and does not decrease the severity or frequency of seizures. Its use by self medication and patented medicines is carried far beyond its usefulness.

PRINCIPLES OF DIET THERAPY*

SAMUEL S. ALTSHULER, M.D., F.A.C.P.†
DETROIT, MICHIGAN

One of the basic endeavors of medical science is the improvement of the conditions of life and the lengthening of the average life span. What progress has been made in this direction in the past has been accomplished as the result of our accumulated knowledge of infectious disease. Future developments along this line may be expected to come through an application of the recently established principles of nutrition. The future race will have not only increased longevity but a larger stature and greater vigor. Man is becoming more and more the master of his own destiny.

Until recently, dietetics was much concerned with deciding what articles of diet might have brought on a disease and what should not be eaten by the patient in order to avoid further harm. In other words, it was a doctrine of omission. Today we know that the sick man needs all the things the healthy man must have in the latter's effort to avoid illness.

Although in short illnesses a brief fast is permissible, and in the case of a patient who is inactive over a long period of time the essential entities may be taken in smaller quantities, in general every therapeutic diet must contain at least all the material known to be required by the normal body.

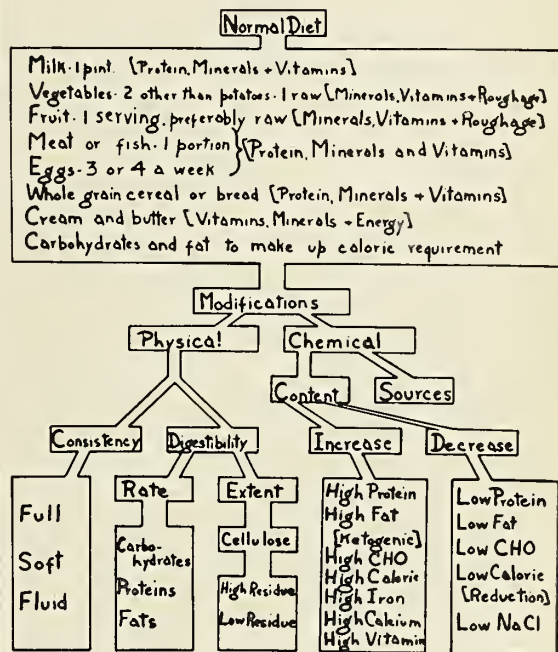
Normal Diet

Let me say a few words first about the normal adequate diet (Fig. 1). Briefly, we can say that the body requirements are adequately met by including in each day's diet:

Milk, 1 pint.
Vegetable, 2 other than potatoes.
Fruit, 1 serving, preferably raw.
Meat or fish, 1 portion.
Eggs, 3 or 4 a week.
Whole grain cereal or bread.
Cream and butter.
Carbohydrates and fat to make up caloric requirement.

The normal adult is in caloric equilibrium when he maintains a constant weight. The protein requirement of $\frac{2}{3}$ gram per kilo of body weight will be supplied by a pint of milk, a serving of meat, eggs or cheese, and what protein there is in cereals, fruits and

vegetables which are included in a normal diet. Additional quantities of protein may be a matter of habit, not necessity. The pint of milk will also furnish about $\frac{1}{2}$ gram of the $\frac{3}{4}$ gram of calcium necessary for adults. The meat or its substitute, milk and cereals will insure adequate phosphorus ($\frac{1}{3}$ gram daily).



Adapted with the kind permission of the Dietetics Department of Harper Hospital

Fig. 1.

The need for iron is taken care of automatically in a diet wisely chosen in other respects. Vitamin A will be found in milk, butter and eggs, and a serving of green or yellow vegetable; vitamin B, from whole grain cereals and three or four servings of fruit and vegetables; vitamin C from a serving of citrus fruit, raw cabbage or tomatoes; vitamin G (B2) from milk and

*Read before the Noonday Study Club, Detroit, December 17, 1935.

†Dr. Altshuler graduated from the University of Michigan Medical School, 1925. He specialized in Internal Medicine. He was formerly instructor in the Department of Internal Medicine, University of Michigan College of Medicine. He is Assistant Physician to the Out-Patient Department of Harper Hospital; Attending Physician and Chief of the Department of Metabolism, William J. Seymour Hospital, Eloise, Michigan. He is a Fellow of the American College of Physicians.

meat. Vitamin D is the only food factor that we feel may have to be added in the form of Cod Liver Oil, especially in localities where sunshine is not plentiful.

Therapeutic Diets

A therapeutic diet should be a modified normal diet, and this may be done in two ways:

1. Vary the physical form, which includes the texture and flavor of food.
2. Vary the chemical composition, which includes the calories, carbohydrate, protein, fat, minerals and vitamins of the total foods in twenty-four hours.

In prescribing a diet it must be decided which of these characteristics of the foodstuffs need to be modified to fit the abnormality we wish to treat. For example, in a disturbance of the digestion of fats, we should limit that factor in the diet. In the case of an underweight patient with anorexia, we should modify the caloric value without any increase in bulk. In a case of spastic bowel, we should eliminate foods with coarse fiber.

However, it must be borne in mind that whatever the abnormality, the material needs of the body are the same. Therefore, in planning our treatment, the diet must be complete and at the same time permit the modification in question.

What are the indications for special diets? Diet cannot hope to attack morphological abnormalities, but, considering disease as a biochemical and biophysical problem, the functional abnormalities that cause it or accompany it can be corrected or limited by diet. For example, in diabetes mellitus the functional disturbance is a lessened ability to oxidize glucose. This is responsible for the signs and symptoms and complications of the disease. A diet may be so devised that the oxidation of its glucose content is within the capacity of the patient. When this has been accomplished, all the secondary disturbances abate and the patient who adheres to the diet may lead an otherwise normal life.

Physical Modifications

Our first method of modifying the diet, that of varying the physical form, includes changing the factors of consistency and digestibility.

Modifications of consistency are designated as fluid, soft and full diets. The fluid and full diets are universally agreed upon, but what should be included in a soft diet seems still to be controversial. The soft diet is prescribed for only a short period during a time when eating is not very attractive to the patient. It should provide little variety and low residue with only maintenance calories, and should require little mastication. There is no reason why the inclusion of scraped beef or the white meat of chicken in such a diet should be looked upon with horror.

The term "digestibility" seems to have more than one meaning. Scientifically, we mean the percentage of the nutrients of the food which are available to the body for use either as a fuel or building material—it may sometimes be expressed as "the coefficient of digestibility." In common parlance, digestibility means the ease with which food is assimilated and the comfort it gives.

A surprisingly large percentage of food is utilized. Atwater has shown that the following average amounts are utilized: protein, 92 per cent; fat, 95 per cent; carbohydrate, 97 per cent. Foodstuffs from animal sources are more completely utilized than those from vegetables. For example, protein from animal averages 97 per cent, from vegetable 84 per cent; fat from animal 95 per cent, from vegetable 90 per cent; carbohydrates from animal 98 per cent, from vegetable 97 per cent. Fat is commonly believed to be difficult to digest but Langworthy in his studies of animal fats found that butter is 97 per cent utilized and mutton 88 per cent. He also found that the digestibility of other foodstuffs was not altered by the presence of considerable fat. He pointed out that fats of low melting point were more completely assimilated than those of higher melting point, thus the coefficient of digestibility ran as follows: butter 97 per cent, lard 97 per cent, beef fat 93 per cent and mutton 88 per cent.

The completeness of the utilization of a food depends upon its physical state, hence the advantage of cooking. Thus raw egg white was 80 per cent and cooked egg white 88 per cent digested. Psychic prejudice does not influence the ultimate utilization of food.

TABLE I

Article of Diet (100 g. portions)	Evacuation Time		
	Rapid	Slow	Average
Beef	2:35	3:25	3:00
Lamb	2:30	3:20	3:00
Veal	....	....	2:50
Pork	2:45	3:40	3:15
Chicken	2:45	3:45	3:15
Turkey	3:00	3:45	3:30
Guinea hen	....	4:00	4:00
Fish	....	....	2:50
Milk			
Cows'			
400 c.c.	....	....	2:30
75 c.c.	....	....	1:15
Mothers'			
225 c.c.	....	....	2:25
150 c.c.	....	....	1:40
Gelatin	....	....	2:00
Eggs	2:15	3:15	2:40
Vegetables	2:00	2:30	2:50
Fruits	1:35	2:20	2:00
Bread, cereals	....	....	2:40
Cakes	....	....	3:00
Pies	....	....	2:30
Puddings	....	....	2:20
Sugars, candies	....	....	2:05
Ice cream	....	....	3:15
Ices	....	....	2:35
Nuts			
25 g.	....	....	3:00
50 g.	....	....	4:00

TABLE II

Article of Diet (100 g. portions)	Highest Average Acidity (c.c. N/10 alkali to neutralize 100 c.c. juice)
Beef	120
Lamb	135
Veal	140
Pork	120
Chicken	125
Turkey	140
Guinea hen	110
Fish	130
Milk	
Cows'	
400 c.c.	100
75 c.c.	45
Mothers'	
225 c.c.	90
150 c.c.	60
Gelatin	70
Eggs	80
Vegetables	75
Fruits	90
Bread and cereals	80
Cakes	90
Pies	90
Puddings	90
Sugars and candies	70
Ice cream	105
Ices	65
Nuts (25 to 50 g.)	100

Secretory and Motor Responses

The other meaning of digestibility, namely, the ease and comfort with which food is disposed of by the stomach and intestines, depends mainly on the secretory and motor response which the food calls forth and the subjective sensation which it produces. The physical state of the food, its chemical composition, its appeal to appetite and sometimes the idiosyncrasy of the individual are factors.

Hawk and his associates have studied the secretory and motor responses called forth by various foods in healthy individuals. They assumed that the foods which remain in the stomach a shorter time and call forth less secretory response are most digestible.

Table I shows Hawk's figures for the evacuation time of various foodstuffs.

He found that normally there were slow and fast stomachs. Studying this table, we see that beef, lamb, veal, pork, chicken and turkey have very little difference in their evacuation time. Furthermore, they found that roast beef is handled by the stomach with equal ease whether it is rare, medium or well done. Hamburger steak, stewed beef, corned beef and dried beef were in the stomach the same length of time as roast

beef. Frankfurters and sweetbreads left more quickly.

In the case of pork meats, pork chops and fried ham took a longer time, and bacon the longest of all, taking four and a half hours. This is most interesting in view of the fact that many pediatricians are giving bacon to children before they allow any other meat.

The total acidity produced by various foods is shown in Table II.

It is interesting to note that lamb produces more acidity than the other meats and that pork produces no more than beef. Thus, since the pork meats are always eliminated first, both in evacuation time and acidity, the digestibility of this meat is no different than that of beef.

Eggs leave the stomach sooner than meats. Raw egg whites leave more rapidly and produce less response than any other egg preparation. Egg yolk has a longer evacuation time and more secretion. Hard-boiled eggs require ten minutes longer to evacuate but the acid response is the same as the soft. Fried eggs, strange to say, were handled by the stomach as easily as boiled eggs. It was interesting to note that eggs

give rise to a considerable secretion of acid, although less than meat.

Among the vegetables, sweet potato had a longer evacuation time than white potato, but whether boiled, creamed, mashed or baked the time was not immoderate. Potato salad and potato chips were handled with the same ease. Vegetables low in protein such as carrots, celery, tomatoes, cabbage, lettuce and cucumbers, leave the stomach rapidly, develop moderately high free acid, but little combined, and leave the stomach without great change. The boiled vegetables showed more disintegration.

Pies, pastries and puddings were not difficult for the stomach to handle. The pie crust takes longer than the whole pie. The addition of ice cream to the pie makes very little difference, but the addition of cheese lengthens the time in the stomach. The custard pies had a high acid-combining power. Fruit pies had low acid-combining power. Angel food cake had a longer evacuation time and a higher acid value than devils' food cake.

Hawk's studies of milk are particularly interesting because this food is included in very nearly all therapeutic diets. The studies were made with a subject who was a regurgitator and who could empty his stomach at will, either fractionally or completely. The following observations were made: Milk drunk rapidly makes smaller curds and leaves the stomach more quickly than when sipped. Skimmed milk produces the toughest curds and has the longest emptying time. Whole milk gives softer curds and leaves the stomach sooner. Boiled (5 minutes) milk produces smaller, soft flaky curds which leave the stomach sooner than whole milk. Inasmuch as boiling for five minutes does not alter the nutritive properties of the milk, it would seem that boiled milk should be given dietetic preference. The higher the fat concentration, the smaller and softer were the curds. This observation is of practical importance in relation to our use of milk and cream mixtures in ulcer diets. When 2.5 grams of sodium bicarbonate were added to 500 c.c. of raw whole milk, the curds were smaller and softer than those without the bicarbonate, but this was slower leaving the stomach than boiled milk. Pasteurized milk is intermediate between raw and boiled milk. The temperature of the milk made no difference. If water was taken before the milk, it made

the curds softer and smaller. From the tables, it has been seen that milk taken in small amounts (75 c.c.) has the most rapid emptying time and produces the lowest acidity of any of the foodstuffs studied.

Residue

In speaking of residue, we must distinguish between moist residue, which has to do with bulk, and dry residue, which has to do with fiber content of the excreta. For example, Hosoi, Alvarez and Mann found in their experiments that bread, butter, soft-boiled eggs and milk have a high moist residue but a very low fiber content. Thus, if we desire to give the digestive tract a rest and have as few bowel movements as possible, we would not include these foods in the diet. On the other hand, lean meat, rice, hard-boiled eggs and sugars had a low moist residue and also a low fiber content, and would be preferable in such a condition. This is an important point inasmuch as the milk diet is an old standby in the treatment of all disorders of the gastrointestinal tract. Patients with diarrhea many times do poorly when placed on milk, but will improve on a diet containing lean meats and pure sugars.

The aforementioned investigators, Hosoi, Alvarez and Mann, made an anastomosis between the terminal ileum and lower rectum in dogs to study food residues. They regarded the relationship of the moist weight of feces to moist weight of food as an index of efficiency of digestion. They found the startling fact that milk gives a large residue as well as fruits, breads, potato, lard, butter, Swiss cheese, soft-boiled egg, raw egg albumen and lactose. These foods would, therefore, be regarded by this standard as difficult of digestion. On the other hand, meat gives the smallest residue and, therefore, must be regarded as easy of digestion. In the same group with meat were hard-boiled egg, liver, rice, farina and cottage cheese. They found that the lowest dry residues were seen with dextrose, sucrose, gelatine, liver, meat, bread and milk, lard and butter. The largest dry residues were seen with potato, raw bananas, lactose and raw apples. Rice was almost perfectly digested.

The combination of bread with milk and that of egg with milk enhanced the digestibility of both foods; thus, egg-nog would be easily digested.

The physical state of the food and consequent length of time in the stomach influenced the digestibility. Meat was more carefully digested when eaten as lump than when finely ground, and potatoes were better digested in lump than when mashed. Swiss cheese was better digested in lumps than when scraped. These results are surprising in view of the usual prescription of our bland, low residue diets. Although we cannot apply these experiments on dogs unreservedly to man, still some revision of the old dietary beliefs seems in order.

Certain foods are shunned because they are believed to be difficult to digest. For example, many people believe that they cannot drink milk. Unless there is evidence of an allergic reaction or of an overactive, sensitive intestinal tract, it is best to insist that they take milk in view of the fact that it is one of the most valuable foods and is usually well borne by the vast majority of sick people.

Cheese is commonly thought to be indigestible but no scientific basis for this has been found. Hot breads when light and well made and when eaten slowly are well borne. Pies, if the crust is crisp and well-made, not soggy, are easily digested. Sweets taken in small amounts at the end of the meal do no harm.

Oils and fats are ordinarily well borne if taken in moderation. Fried foods soaked in grease are slow of digestion because the fat prevents ready access of the digestive juices. If fried in deep fat, however, which quickly produces a coagulum on the surface and thus prevents the penetration of fat to the interior of the food, they are well digested.

Cooked foods are more digestible than raw. Foods subjected to extreme heat for a long period of time, however, show an opposite effect.

Alvarez, in a recent article, considers digestibility in the sense of the "likelihood that the food will disagree in some way with the person who eats it." This, he says, may be on an allergic basis or there may be found in the food something that can cause irritation of the bowel, as druglike substances or indigestible cellulose. He suggests that the diet be fitted to the individual, first determining what foods disagree with that individual.

Deficiencies

Of the conditions requiring therapeutic diets, the most obvious are those due to deficiency. Such conditions demand very little effort on the part of the person prescribing the diet. The diagnosis indicates precisely what adjustments need to be made, whether the inadequacy is due to a lack of vitamins, of minerals, of proteins, of energy or of fiber. It is evident that disturbances arising from a deficiency are corrected by a diet normal for the individual augmented by a greater supply of the properties he may lack.

Chronic undernutrition has been shown by Strang and his associates to be due, not to metabolic anomaly nor to abnormal functioning of the endocrines, but merely to a lack of adequate food intake. Some of the post-operative invalids have received inadequate diets sufficiently long to permit avitaminosis.

The various clinical manifestations arising from avitaminosis are being better connected with the specific vitamin of which there is a lack. Authorities on nutrition consider that the changing conditions of man's environment have deprived him of part of the vitamin D that he used to get by natural methods, and they feel that an additional supply of this vitamin is of benefit, especially in the case of a growing child.

The development of information about anemia during the past decade has brought about the clear recognition that this condition may be dependent upon mineral deficient nutrition.

Among the conditions from which deficiencies arise is that of excessive utilization, which may make inadequate a diet that has served well in the past. It should be common knowledge that during pregnancy and lactation there is need for additions in certain minerals, protein and energy-producing foods. Briefly, we can say that the diet for the pregnant and lactating woman should include daily one and a half quarts of milk, a serving of meat or cheese, a serving of liver or eggs (for the iron content), three or four servings of vegetables and fruits including one green leafy vegetable or a citrus fruit as a source of vitamin C. Additional vitamins should be secured by the use of yeast and Cod Liver Oil. The patient deserves a definite, detailed explanation of the dietary changes during pregnancy. Too many physicians,

when finding a trace of albumen in the urine, merely advise the patient to "omit all meat and eggs" in the diet or, if they do not wish the patient to get too heavy during pregnancy, advise her to "leave out all starchy foods." Labor-saving as this may be, it is also thoughtless and unfair to the mother and her child.

Patients suffering from prolonged fevers, another form of excessive utilization, should not be starved, but on the contrary more calories should be given in easily digested form to compensate for the increased metabolism. It was shown long ago that the convalescence from typhoid fever was prolonged when the diet had been deficient in energy-producing foods.

Of the deficiencies due to excessive loss, in the case of anemia following hemorrhage, the addition of liver and iron to the normal diet will hasten the restoration to the normal blood level. The loss of chlorides in conditions associated with vomiting will cause a marked alkalosis unless the chlorides are replaced either by hydrochloric acid if vomiting has stopped or saline solution by injection. Diarrhea, vomiting, sweating and diuresis will cause a marked dehydration and this water must be *rapidly* replaced either orally or as a 5 per cent glucose injection, else the life of the patient is endangered.

Abnormalities of the Gastro-intestinal Tract

Physicians are most concerned about diet in the treatment of diseases of the gastro-intestinal organs. Too often they resort to a negative type of therapy—omitting all foods without giving sufficient consideration to the possibility of thus creating deficiencies. An example of this is the advice: "Limit your diet to milk." The willingness of the doctor to believe the patient that certain wholesome foods are "poisoning" him, or cannot be digested by him, has been the cause of many conditions of "nervous" or "functional" indigestion.

The digestive and absorptive mechanism is remarkably efficient and not easily disturbed. Barring organic disease, it can nearly always be counted upon to do its work very well if the patient will but eat normal food and let nature take its course. But if the individual has no confidence in

this mechanism and is convinced that he must pamper it, his phobias will succeed in impeding digestion. Dietary adjustment is not the proper treatment in such cases. People of this type need psychotherapy. After such misinformed sufferers are excluded, one is in a position to deal rationally with the people who really have something wrong with the digestive tract.

In conditions of over-activity of the gastro-intestinal tract, food should be so selected that it will not stimulate the digestive tube. This is done by selecting food whose odor, taste and color are not pronounced; by serving meals that are neither hot nor cold; by small meals; and by offering the food in a finely divided state. An example of this is the ulcer diet, whose purpose is to furnish adequate nutrition while avoiding mechanical, chemical and thermal irritation. Eliminate hard particles that might irritate or increase the injury of a diseased lining membrane. This necessitates consideration of the fiber content of foods. If the lesion is in the stomach, even cooked pureed vegetables cannot be used, but they would not irritate the lower bowel should that be the seat of the trouble. Bran or skins of fruits and shells of legumes and seed cannot be used in the case of any denuded spot anywhere in the tract. The necessary bulk may be secured in such cases by adding a hemi-cellulose as agar-agar or mucilose. Diet for patients with diarrhea should contain foods having a low fiber content and producing a low moist residue.

Stimulation of the gastro-intestinal tract where there has been too little activity, in such cases as lack of appetite or invalidism, may be achieved through selection of foods considering the likes and dislikes of the patient and presentation of the food in its most appetizing, attractive and palatable form. Variety is important in arousing interest and stimulating digestion. The device of offering small amounts at frequent intervals often is successful in maintaining the patient's interest in foods.

Obesity

Obesity is due to an intake of energy greater than the outgo. It is true that certain endocrine disturbances may lower the metabolism, decreasing the number of calories necessary for maintenance, but if the inflow is kept less than the outflow of

energy, the patient will always lose weight. This is accomplished by a diet which will adequately meet the patient's requirements except in energy value. One gram of protein per kilo of ideal weight is necessary to maintain nitrogen balance. A reduction diet given to a patient must be a definite prescription. Write out exactly what should be included, from what foods they may choose and how much they are to take. It is an error merely to advise the patient to "leave out all desserts and fats." Under such a system they follow a haphazard and uncertain diet under constant danger of diseases of deficiency. In middle-aged or elderly patients it is dangerous to attempt to effect too rapid a reduction.

Allergy

Food allergy is becoming more widely recognized as a cause for symptoms associated with the taking of foodstuffs. Without going into the problem to any extent here, may I remind you that if it is discovered that some staple food must be eliminated from the diet, a way of compensating for that food must be found? For example, if milk be stricken from the dietary, the patient must have some other way of obtaining calcium.

Cardiac Diet

The principles of the cardiac diet need to be more widely understood. Although the caloric value may be reduced, it should be adequate, else we should but add a condition of undernutrition to the already weakened heart. If the patient is overweight, it is well to give him less fat to reduce the weight, but care must be taken that the reduction be not more than two pounds a week and preferably only one pound per week. Protein foods should not be omitted altogether as is so often done by having the patient abstain from all meat, fish, eggs and cheese. There must be one gram of protein per kilo if the patient is given a reduction diet. The meals should be small and given frequently for a large meal can cause a definite depression of the T waves in Leads I and II. If edema is present, restrict the salt intake to that contained normally in the food. Do not restrict the fluids too much. Give sufficient fluids so that there is 600 to 1,000 c.c. of urine excreted in twenty-four hours. A diet with an acid

ash will help to eliminate the edema fluids from the tissues.

Diabetes

The dietetic treatment of diabetes mellitus is too large a subject to take up here. Every physician who intends to treat diabetic patients should make himself thoroughly familiar with some one method of treatment and follow it closely. It does not make any difference in the ultimate result on the patient which type of diet you use—high or low carbohydrate, high or low fat—as long as you fulfill two requisites: Keep the patient sugar- and acetone-free, and give him enough calories for maintenance and to carry on his usual occupations.

Renal Disease

The dietary management of all renal diseases must accept one fundamental fact, namely the lessened ability of the kidneys to form concentrated urine. This condition may be met by increasing the supply of water and by diminishing the formation of solids that leave the body by way of the kidneys. The first part is simple enough: Increase the intake of dietary fluids. The second is more difficult. It is not easy to reduce the amount of solid excretory products. The prime factors in the dietary treatment of the non-edematous patient with renal disease are:

1. The patient must have maintenance calories.
2. The protein intake must be $\frac{2}{3}$ gram per kilo of average body weight. In this connection use milk, cheese and eggs as the chief sources of protein. Animal tissues should be given sparingly if at all, since they are higher in the non-protein nitrogenous substances which must be excreted by the kidneys.
3. A fluid intake must be established sufficient to keep the specific gravity of the urine well below the maximum attainable by the kidneys.

Edema

The presence of edema or the tendency toward its development requires further adjustments. Foods should be selected so that there will be as much acid as base released in the combination. Furthermore, avoid foods high in sodium. Use salt-free bread and butter and allow no sodium chloride in

cooking or at the table. Potassium chloride does not increase edema and may be used as a substitute. Increase the acidity of reaction by administering acid-producing salts as ammonium chloride (6 to 10 grams daily in capsule). Fluids are forced to assure a sufficient amount of water—4,000 to 5,000 c.c. daily is needed—so that the kidneys may remove all of the extra sodium chloride forming in the body as a result of the intake of acid-producing drug. When the edema is gone, the ammonium chloride is discontinued but we adhere to the neutral low salt diet to prevent its recurrence.

Conclusion

I have touched briefly on a good many points, but in closing I should like to repeat the two which seem to me most cogent:

First, that a therapeutic diet is a normal diet that has been modified to adapt it to a diseased condition and should contain all the materials known to be required by the normal body.

And second, that the dietary prescription

should be as definite as any other prescription. It should leave no uncertainty in the patient's mind about the type, the quality and the quantity of foods to be consumed. You cannot really expect the patient to know more about nutrition than what he hears on the radio, and you must tell him exactly what and how much you want him to include in his diet.

Bibliography

1. Alvarez and Hinshaw: Foods that commonly disagree with people. *Jour. A. M. A.*, 104:2053, (June 8) 1935.
2. Atwater, W. O.: Principles of nutrition and nutritive value of food. *Farmer's Bull.* 142, U. S. Dept. of Agric., p. 24.
3. Coffin, Joseph: The lack of vitamin D in common foods. *Jour. A. M. A.*, 105:119, (July) 1935.
4. Hosoi, Alvarez and Mann: Digestion efficiency with various foods and under various conditions. *Arch. Int. Med.*, 41:112, (Jan.) 1928.
5. McLester, J. S.: Nutrition and Diet in Health and Disease. W. B. Saunders Co., 1931.
6. Minot, George R.: The anemias of nutritional deficiency. *Journal A. M. A.*, 105:1176, (Oct. 12) 1935.
7. Newburgh and McKinnon: The Practice of Dietetics. Macmillan Co., 1934.
8. Rehfuss, Bergein and Hawk: Response of normal human stomach to various standard foods. *Am. Jour. Med. Sci.*, 171:359, 1926.
9. Strang and Evans: Undernutrition and its treatment by adequate diet. *Ann. Int. Med.*, 7:45, (July) 1933.
10. Strang, McClugage and Brownless: Metabolism in undernutrition. *Arch. Int. Med.*, 55:458, (June) 1935.
11. Langworthy and Holmes: Digestibility of some animal fats. *U. S. Dept. of Agric. Bull.* 310.

THE INTERPRETATION OF ENCEPHALOGRAMS*

RUSSELL N. DE JONG, M.D.,† and RAYMOND W. WAGGONER, M.D.‡
ANN ARBOR, MICHIGAN

Notwithstanding its relatively recent development, encephalography has become an important addition to the neurologist's diagnostic armamentarium, and during the sixteen years since its introduction it has come into common use in neurologic and neurosurgical clinics. The present method of replacing the cerebrospinal fluid by air by the lumbar route was instituted by Dandy in 1919, one year after he had first introduced air directly into the cerebral ventricles as a diagnostic procedure in certain cases of hydrocephalus and brain tumor. Within the next few years similar procedures were described independently by Wideröe in Norway and by Bingel in Germany. During the intervening years encephalography has come to be used as a diagnostic and therapeutic measure in all neurological centers. Over 150 encephalograms were done in the University Hospital during the past year.

It is felt here that encephalography or the injection of air by the lumbar route is more

advisable in most cases than ventriculography or the introduction of air directly into the ventricles. Encephalography insures more complete drainage of the cerebrospinal fluid, and consequently better delineation of the intracranial structures may be obtained. By this method also not only the ventricles but the cerebrospinal fluid pathways are replaced by gas, and as a result the subarachnoid channels and the basilar cisterns may be identified, and changes in them may be noted. In most cases encephalography is as safe as ventriculography and it can be done with less inconvenience to the patient. Ventriculography has the disadvantage of being a relatively major surgical procedure accompanied by a definite trauma to the brain.

*From the Department of Neurology, University Hospital. Presented at the meeting of the Detroit Society of Neurology and Psychiatry, Ann Arbor, Michigan, September 19, 1935.

†Dr. DeJong was graduated from the University of Michigan in 1929 and received his M.D. degree in 1932. In 1936, he received an M.S. degree in neurology. At present he is Instructor in Neurology, University of Michigan.

‡Dr. Waggoner was graduated from the University of Michigan Medical School in 1924 and received an Sc.D. from the Graduate School of the University of Pennsylvania in 1930; he is, at present, Associate Professor in Neurology, University of Michigan.

At the University Hospital ventriculography is reserved for cases with marked increase of intracranial pressure, as judged by the presence of papilledema, increased pressure at spinal juncture, and roentgen evidences of increased pressure.

The interpretation of encephalograms requires not only a familiarity with roentgenography in general and cranial roentgenography in particular, but a thorough knowledge of the anatomy of the brain and of the circulation of the cerebrospinal fluid. In the past the impressions gained from encephalograms have been based mainly upon the gross abnormalities of the ventricles and the subarachnoid spaces. The value of encephalography will no doubt continue to increase as the finer cerebral structures are recognized in the films and the significance of variations in them is appreciated. By thus increasing our knowledge of intracranial abnormalities and of the methods of recognizing them the scope of encephalography is being broadened from use only in gross changes such as neoplasms, cysts, and developmental anomalies to use in the various vascular, degenerative, and inflammatory conditions.

The accuracy of encephalographic diagnosis depends upon a thorough acquaintance with the appearance of the normal cerebral structures. The ventricular shadows are the most easily seen and even in poorly executed encephalograms the lateral, third, and fourth ventricles and their connecting structures may be visualized. The lateral ventricles are normally symmetrical, and when well filled with air one can distinguish the anterior or frontal horn, the body, the posterior or occipital horn, and the inferior or temporal horn. The size of the ventricles varies some within normal limits. The interventricular foramina or the foramina of Monro form a connection between the lateral ventricles and the third ventricle. At times these structures can be made out in the lateral view. The third ventricle is a midline cavity which connects the foramen of Monro anteriorly with the Sylvian aqueduct posteriorly. In the antero-posterior view it appears in the midline as an elongated oval ventral to the shadows of the lateral ventricles, and in the lateral encephalogram it is seen as a trapezoidal structure, from the caudal aspect of which the aqueduct can be followed to the fourth ventricle. In the antero-posterior view the fourth

ventricle may be hidden by the frontal sinuses, the occipital bone, and the third ventricle. In the lateral view, however, it is seen as an isosceles triangle with the long side forming the rostral border or floor.

Air injected into the spinal subarachnoid space is also distributed throughout the cerebrospinal fluid pathways over the surface of the brain. It is consequently seen to outline the cerebral sulci and convolutions, certain of which are regularly visible in the encephalogram while others are seen only when there has been atrophy of the brain substance. The subarachnoid channels normally are most clearly visible over the frontal and parietal surfaces of the brain superior to the Sylvian fissure. The Sylvian fissure is seen as a cleft on the lateral aspect of the brain, and by following it the island of Reil frequently may be outlined. If one observes closely the fissure of Rolando is seen, along with some of the other fissures present on the lateral aspect of the brain. Medially is the longitudinal fissure, and the callosal and cingulate sulci may be demonstrated in most instances. The gyri lying between these various sulci may be delineated if the sulci are clearly seen. In cases of cortical atrophy some of the smaller sulci are visualized.

In certain regions on the ventral surface of the brain the arachnoid and pia are widely separated to form the spaces known as the subarachnoid cisterns. These structures communicate with each other and with the spinal subarachnoid space. They are usually seen in the encephalogram and are fairly constant in appearance. The cisterna magna communicates with the subarachnoid space of the spinal canal and is bounded by the medulla and the tela choroidea of the fourth ventricle anteriorly, by the vermis of the cerebellum above, and by the cerebellar hemispheres laterally. Anteriorly and laterally this cistern communicates with cisterna pontis, which surrounds the anterior and lateral aspects of the pons and extends cephalically to communicate with cisterna interpeduncularis. This is an irregular rectangle between the peduncles and the infundibulum. Cisterna chiasmatis is a shallow cistern above and slightly anterior to the pituitary fossa. The cisterna ambiens or *venæ magnæ cerebri* may contain a small amount of air under normal conditions, although large amounts of air are abnormal. This is just above the cerebellum and extends ante-

riorly to the corpora quadrigemina and the pineal body, and air in this cistern may outline these structures. Paired anterior projections of cisterna ambiens are occasionally

the various structures, normal or abnormal. Quite as important, if not more so than the operative or roentgen technic, is the correct interpretation of the films. In order to in-

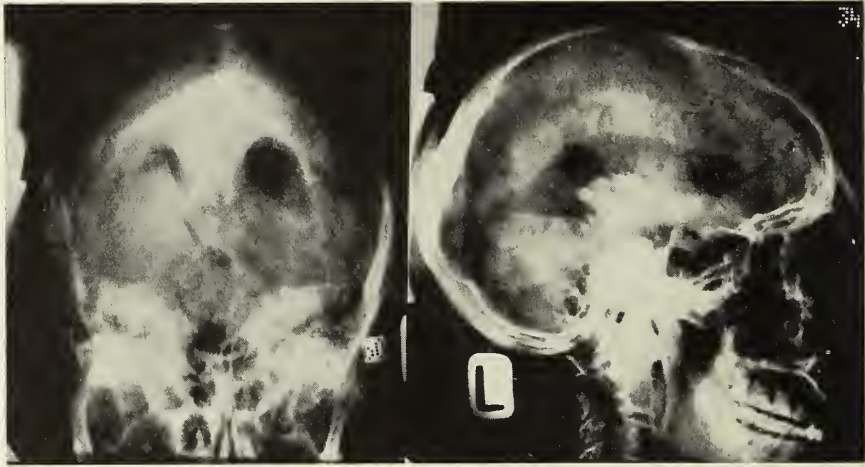


Fig. 1. Encephalograms showing narrowing of the frontal horn and body of the right ventricle with dilatation of the left lateral ventricle.

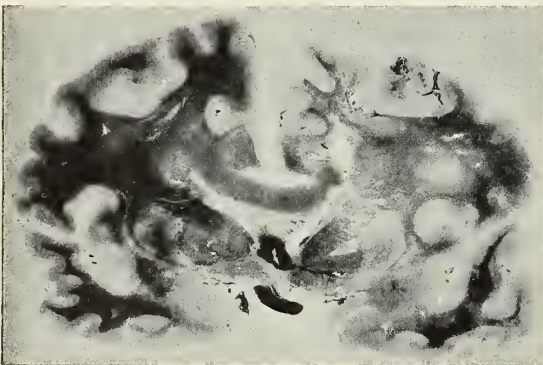


Fig. 2. Section of the brain (Weigert stain) showing the postoperative defect with tumor tissue invading the right fronto-parietal region and the knee of the corpus callosum.

seen. In addition to the above structures, there are certain other findings that one occasionally sees. The choroid plexus may be visible within the lateral or fourth ventricles, and may easily be misinterpreted as an intraventricular lesion, especially if calcification is present. Occasionally one sees what appears to be air outlining the cerebellum. It has been felt by us that this might be evidence of cerebellar atrophy, but this has not been confirmed by autopsy material.

Correct interpretation of encephalographic films depends upon a variety of factors. It is important that the air injection be done properly by an experienced operator. Good roentgen studies are necessary to bring out

crease our knowledge of normal and abnormal cranial structures and our ability to interpret them in the encephalogram, we have been interested in comparing the picture seen in the encephalogram with the post-mortem examination of the brain in a few patients that have had encephalograms and have later died. The findings in a few of these cases follow.

Report of Cases

1. A man, aged fifty, was admitted to the hospital complaining of convulsions involving the left side of the body and of weakness of the left arm and leg. The symptoms had been present for a period of three years, with the late onset of bitemporal headaches, diplopia, and incontinence of urine. Examination showed a left hemiparesis with decreased sensation and astereognosis on the left. The diagnosis appeared evident but for confirmation an encephalogram was done. This showed depression of the frontal horn and body of the right lateral ventricle. There was also slight flattening of the superior border of the left ventricle, which was dilated in comparison with its fellow on the right. The subarachnoid channels were better visualized over the left than the right hemisphere and on the right they were absent over the vertex (Fig. 1).

Osteoplastic craniotomy showed a yellow, gelatinous tumor near the midline in the right cerebral hemisphere. It was located just anterior to the precentral gyrus. The tumor, which was only partly removed, was found to be a cellular astrocytoma. The patient failed to rally following the operation and died three days later. Autopsy showed a large tumor occupying large parts of the right frontoparietal region and the knee of the corpus callosum (Fig. 2).

2. A man, aged sixty, was admitted as a transfer from the State Psychopathic Hospital where he had

been brought because of confusion, loss of memory and helplessness. He had shown progressive mental deterioration over a period of seven years. There was loss of retentive memory, inconstant apraxia,

alogram was done and 220 c.c. of cerebrospinal fluid were removed and a like amount of air was injected. The films showed the lateral ventricles to be somewhat larger than normal and there was a

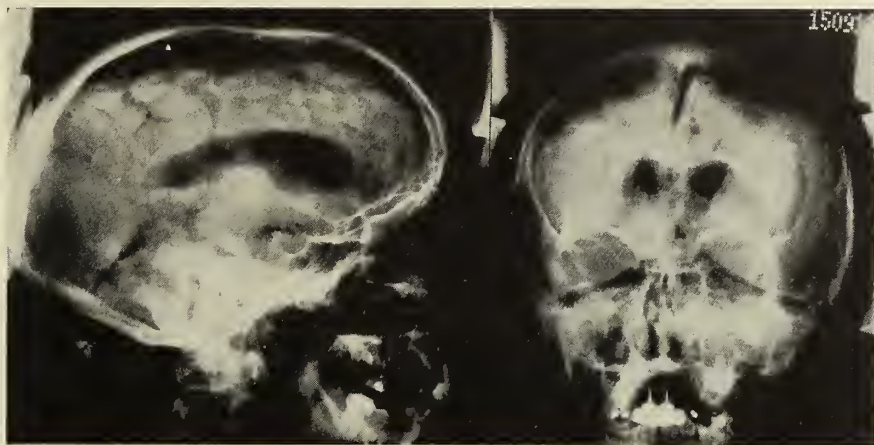


Fig. 3. Encephalograms showing dilatation of the lateral ventricles with subdural air over the cerebral cortex, an error in technique which is oftentimes confusing.

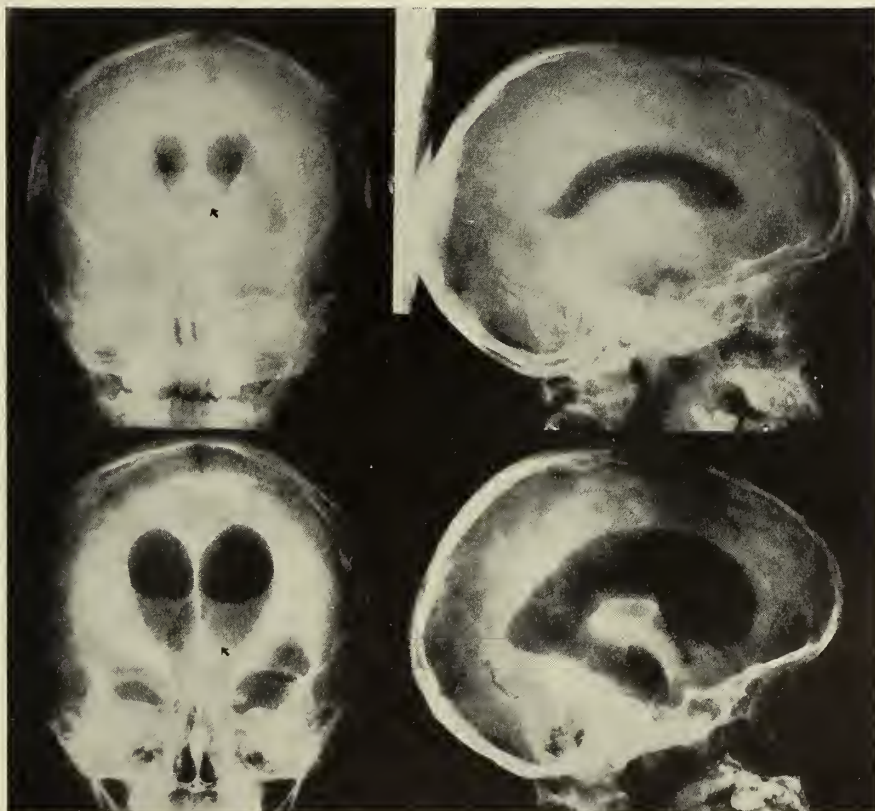


Fig. 4 (*above*). Encephalograms showing moderate internal hydrocephalus. There is a small amount of air in the superior portion of the third ventricle and the third ventricle appears pushed up and to the left, as indicated by the arrow. (*below*) Ventriculograms done one year later show marked dilatation of the lateral ventricles. There appears to be a mass protruding into the inferior half of the right wall of the third ventricle, as indicated by the arrow.

and disorientation. Visual and auditory hallucinatory phenomena and an atypical Parkinsonian syndrome with masking of the face, drooling of saliva, and rigidity of the extremities were noted. An enceph-

large amount of air over the cortex. The films were first interpreted as showing cortical atrophy but more critical examination showed that the air over the cortex was subdural rather than subarachnoid,

and because of this, the changes were not considered evidence of atrophy (Fig. 3).

The patient continued to show progressive deterioration, and died sixteen months later. The brain

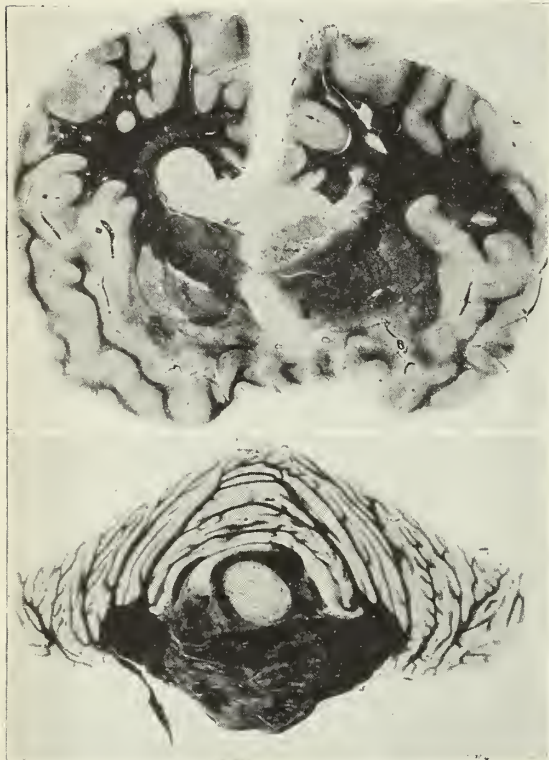


Fig. 5. Section of the brain (Weigert stain) showing the operative defect and tumor tissue in the region of the thalamus and basal ganglia on the right. Section of the pons shows tumor within the fourth ventricle compressing the tegmentum.

at autopsy was found to weigh 1,510 grams. There was no evidence of atrophy, diffuse or cortical. The ventricles were moderately widened. The basal vessels showed some atheromatous changes. Microscopic examination also failed to show evidence of atrophy. A few senile plaques were seen, but there were no Alzheimer fiber changes. The pathological diagnosis was cerebral arteriosclerosis with moderate senile changes.

3. A boy, aged seven, was admitted because of progressive weakness of the left arm and leg. The examination showed no changes aside from hyperactive reflexes on the left and a positive Babinski sign. An encephalogram was interpreted as showing moderate internal hydrocephalus. Both lateral ventricles were moderately dilated, but there was no positive evidence of air in the third ventricle aside from a small globule which appeared to be in the superior portion. The fourth ventricle was faintly outlined by air (Fig. 4). Interpretation of these films was difficult because they were underexposed. However, on the basis of these findings a lesion in the neighborhood of the third ventricle should have been suspected, but no diagnosis was made. The patient's symptoms increased, the weakness became more marked, and he developed headaches. When readmitted he showed limitation of extraocular movements in all directions. There was papilledema of nearly two diopters with minute linear hemorrhages. In addition to the weakness on the left there

was lack of coördination of this side of the body. Because of the signs of increased intracranial pressure a ventriculogram was done. There was gross dilatation of the lateral ventricles. A definite indentation in the inferior half of the right lateral wall of the third ventricle gave the appearance of a mass protruding into the ventricle. There was no air in the fourth ventricle or aqueduct (Fig. 4). Osteoplastic craniotomy showed a neoplasm involving the inferior portion of the right thalamus. The tumor could only be partly removed. The patient died two days later. Autopsy showed the tumor to extend anteriorly into the basal ganglia and posteriorly to the midbrain and pons. It compressed the aqueduct, and on the right the corpora quadrigemina, red nucleus, and substantia nigra were completely destroyed. Portions of the pulvinar and caudate nucleus were also invaded. Histologically the tumor was a fibrillary astrocytoma (Fig. 5).

Conclusions

Encephalography may be considered an important measure in the diagnosis of intracranial lesions. By increasing our knowledge of normal and abnormal intracranial structures as demonstrated by encephalograms, we are becoming able to differentiate more accurately various pathological processes. It is becoming possible to make an earlier diagnosis of intracranial neoplasms, and to differentiate them from infectious, degenerative, and vascular processes. We are becoming able to recognize minimal changes in brain structure that were formerly undiagnosed or were misinterpreted. Extensive experience is of the utmost importance in the interpretation of encephalographic films, and that it is easily possible to misinterpret them is evidenced by our second case which was first believed to show evidence of cortical atrophy but was later correctly interpreted. That we should be able to make earlier diagnoses is demonstrated in our third case where encephalography showed changes in the contour of the third ventricle which were not properly interpreted until a year later when the process, then far advanced, was proven by a ventriculogram.

References

1. Bingel, A.: Zur Technik der intralumbalen Lufteinblasung, insbesondere zum Zwecke der "Enzephalographie." *Deutsche med. Wchnschr.*, 47:1492, (Dec. 8) 1921.
2. Dandy, W. E.: Ventriculography following the injection of air into the cerebral ventricles. *Ann. Surg.*, 68:5, (July) 1918.
3. Dandy, W. E.: Röntgenography of the brain after the injection of air into the spinal canal. *Ann. Surg.*, 70:397, (October) 1919.
4. Davidoff, L. M., and Dyke, C. G.: The demonstration of normal cerebral structures by means of encephalography. III. The cerebral convolutions and sulci. *Bull. Neurol. Inst. New York*, 3:147, (June) 1933.
5. Davidoff, L. M., and Dyke, C. G.: The demonstration of normal cerebral structures by means of en-

- cephalography. V. The ventricles, interventricular foramina, and aqueduct of sylvius. *Bull. Neurol. Inst. New York*, 4:91, (March) 1935.
6. Dyke, C. G., and Davidoff, L. M.: The demonstration of normal cerebral structures by means of encephalography. IV. The subarachnoid cisterns and their contents. *Bull. Neurol. Inst. New York*, 3:418, (March) 1934.
7. Dyke, C. G., and Davidoff, L. M.: Recent advances in encephalography. *Radiology*, 22:461, (April) 1934.

8. Pancoast, H. K., and Fay, Temple: Encephalography: Roentgenological and clinical considerations for its use. *Am. J. Roentgenol.*, 21:421, (May) 1929.
9. Torkildsen, A., and Penfield, W.: Ventriculographic interpretation. *Arch. Neurol. & Psychiat.*, 30:1011, (November) 1933.
10. Wideröe, S.: Über die diagnostische Bedeutung der intraspinalen Luftinjektionen bei Rückenmarksleiden, besonders bei Geschwülsten. *Zentralbl. f. Chir.*, 48:394, (March 26) 1921.

A SUCTION APPARATUS

RALPH V. AUGUST, M.D.†

MUSKEGON HEIGHTS, MICHIGAN

The instrument to be described has been found to be both practical and efficient in production of mild negative pressure where such treatment has been found to be indicated. This apparatus consists of a closed system obtained in three 4,000 c.c. bottles with three rubber stoppers, a system of connecting tubes, and two pinch cocks. This is permanently mounted on a supporting stand made of one inch iron pipes and iron ring supports. The over-all height is five feet. It is so constructed that the negative pressure results from water falling approximately two feet six inches.

Method of Operation

Gravity tends to force the passage of water from bottle A to bottle C. This leads to the formation of negative pressure in bottle A. This pressure is transferred through tube N O P to bottle B and from there through tube G D to the patient. A flow of fluid, gas, or both from the patient through tube G D into bottle B allows air from that bottle to pass through tube P O N into bottle A, which in turn allows the water from that container to pass through tube M T K into bottle C. Just prior to passage of all of the water from A to C and while the upper end of tube M is still immersed, tube D is pinched first with the fingers, then with stopcock H, which is at this time transferred from tube Q. Then tube S is pinched with the fingers and bottle C is transferred neck downward to ring 4. Tube S is now released from the fingers only after pinchcock F has been transferred to it from tube R. The water which previously passed from bottle A to bottle C now flows in the opposite direction. After this has been completed the process is reversed. Tube R is pinched, bottle C is transferred back to 3, stopcock F is changed from S to R, stopcock H from D to Q and the production of negative pressure is resumed. These manipulations may be facilitated by application of an added stopcock at T just prior to moving bottle C and keep-

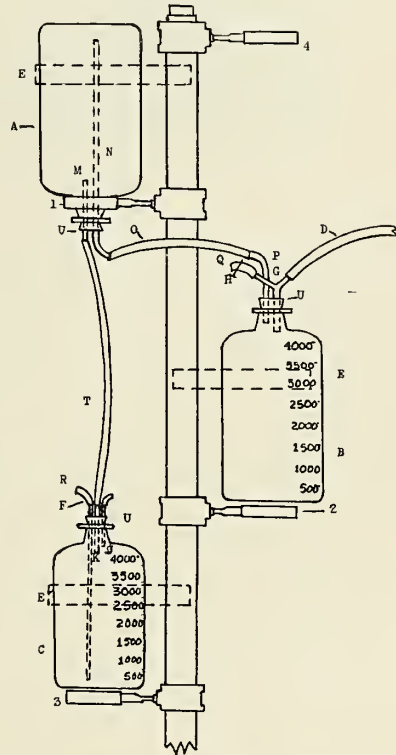


Fig. 1. Diagrammatic sketch of suction apparatus.

- 1, 2, 3, 4—rings for supporting bottles, 4 is slotted for passage of tubes in bottle C.
- A, B, C—4,000 c.c. bottles, empties which formerly contained drugs and obtained from the pharmacy. C bears calibrations in c.c. painted along its wall.
- D—rubber tubing which connects apparatus with Levin tube in patient's stomach, rectal tube, or any other type of tube.
- E—strap of scrap iron, 1x3/32 inch used to brace each bottle in its place.
- F, H—pinchcocks.
- G—"Y" tube.
- I, J, K, M—Straight brass tubing, 1/4 to 5/8 inch diameter.
- N, P—Bent brass tubing, 1/4 to 5/8 inch diameter.
- O, Q, R, S, T—rubber tubing.
- U—rubber stoppers, kept securely in place by a tie of wire.

†Dr. August graduated with the degree B.S. from the University of Notre Dame in 1930; M.D. from the University of Michigan in 1935. He was interne at Hackley Hospital, Muskegon, Michigan, in 1935-1936. He is now engaged in general practice.

ing it there until after stopcock H has been returned to tube Q.

This procedure is very quickly learned by the nurse, who then has full charge of the

need only be interrupted long enough to empty bottle B, less than five minutes.

This apparatus was made from material costing us less than \$2.50. This covered

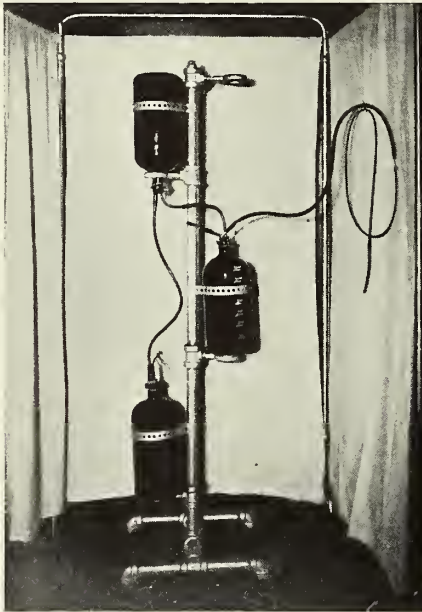


Fig. 2. Apparatus in use.

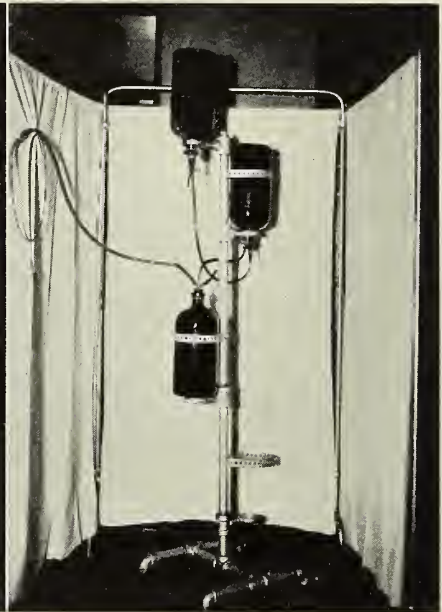


Fig. 3. Apparatus as water is being returned from lowermost to uppermost bottle.

apparatus. Material from the patient passes into bottle B, where it remains until 3,500 to 4,000 c.c. have accumulated. At that time tubes O P and G D are disconnected, bottle B is turned upside down into an appropriate reservoir, and is allowed to drain. This bottle may be washed out to remove all odors. Accurate charting of the quantity of fluid removed from the patient may be based on the calibration painted along the wall of bottle B. There is no mixture of material obtained from the patient with the water in bottles A and C because tube G extends further into bottle B than does tube P. Thus there is no clogging of the tubes in this apparatus, and, except for a minute every half to six hours, siphonage is continuous for a number of days. Then it

the expense of the iron pipe, tubing, rubber stoppers and pinchcocks. The three bottles were emptied drug containers obtained at no cost from the hospital pharmacy.

We have found this apparatus to be more advantageous than the two-bottle affair generally utilized² because this one is compact and always ready for use at a moment's notice, because an accurate record may be kept of the quantity and quality of the material obtained from the patient and because it is simple in operation.

References

1. Goldman, J., and Cohen, A.: Abdominal distention in lobar pneumonia. *Ann. Int. Med.*, 9:1222, (March) 1936.
2. Wangenstein, O. H.: Practical aspects of the therapeutic problem in intestinal obstruction. *Int. Clinics*, 3:227, series 45, 1935.

PHYSICAL THERAPY IN DERMATOLOGY

LEO ORECKLIN, M.D.†

DETROIT, MICHIGAN

In recent years the use of various forms of physical therapy has become a very important part in the therapeutics of skin disorders. The pathology of dermatoses is such that we can readily observe the changes taking place in them as a result of various therapeutic procedures. In other words, if we apply some form of physical therapy to a skin disorder, we can objectively notice the changes taking place in the skin, whereas in internal disorders this is not so easily accomplished.

Also the various types of dermatoses, whether we are dealing with an inflammatory condition, a new growth, benign or malignant in character, or a degenerative process, or an atrophy, most of these dermatoses respond to some form of physical therapy.

From a historical standpoint physical therapy is one of the oldest forms of treatment that we have. Hippocrates, about 450 B.C., describes the use of massage, hydrotherapy and external heat in the treatment of disease. The introduction of electrotherapy, however, is comparatively recent and dates back to the work of Finsen, in phototherapy, and to the early use of x-rays in therapy, after the discovery of x-rays by Roentgen. Most of this work starts with the early years of the twentieth century.

X-rays and ultra-violet rays are really highly actinic forms of radiant energy which have special effects upon living tissues. From a physical standpoint they are electromagnetic waves of shorter wave length than visible light or infra-red rays.

We will first consider x-rays. The rational indications for roentgenotherapy rest upon the effect of x-rays upon living tissues. Briefly described the gross manifestations of x-rays upon human tissues are first a stimulation of the formation of pigment in the skin, and an erythema or superficial dermatitis, both of which are indistinguishable from the tanning and sunburn produced by sunlight. The maximum effects of x-rays, however, are more intense than the maximum effects of sunlight and if the exposures pass the point of producing a dry red dermatitis, there occurs as the next step a bright red vesicular dermatitis, after this ulceration and finally necrosis of the skin. We can therefore obtain various effects from the x-ray varying from a mild stimulation to marked necrosis.

†Dr. Orecklin is a graduate of the University of Toronto Medical School, 1923. He served his internship in Providence Hospital, Detroit, 1923-24. He is on the Dermatological Staff of the North End Clinic, Detroit. His practice is limited to Dermatology.

In the therapeutic applications of x-rays the principle of treatment is to produce a sufficient effect for the purposes of the case, without overstepping the bounds of safety. In skin diseases, except in such conditions as epithelioma, it is always necessary to keep the x-ray reaction well below the point of active dermatitis. "With modern methods of calibration and standardization of x-ray dosage, and the use of automatic electrically controlled timing devices, it is possible for the x-ray therapist to control his dosage with more certainty and with a greater degree of safety. Nevertheless, x-rays should be used with caution and only by a properly trained individual."

We can put the x-ray in the same category as a powerful drug such as morphin or strychnin. If used in proper dosage and for the proper indications we can get good results; otherwise the results are not so favorable.

The changes produced by x-rays upon living tissues may be briefly summarized as follows:

1. They cause atrophy of the appendages of the skin—sebaceous glands, sweat glands, and hair follicles.
2. They have a destructive action upon organisms in living tissues. The bactericidal action of x-rays, however, is not definitely settled. Some authorities claim that there is no direct effect on micro-organisms, but that the environment may be so modified that pathogenic organisms often encounter a less favorable medium upon which to grow.
3. They have a peculiar effect upon the nutrition of living cells, producing in their less intense action a stimulation of the metabolism of the tissues, which, when their effect is greater, may go on to the point of the disorganization of the cells and then destruction.
4. This destructive action upon living cells destroys certain diseased cells, before it destroys the more resistant healthy cells of the stroma.
5. They have an anodyne effect.

From the foregoing effects of x-rays it

may be deduced that they have possible indications in the following groups of affections.

1. Conditions in which it may be desirable to remove hair.
 - (a) Syccosis
 - (b) Tinea capitis
 - (c) Selected cases of hypertrichosis
2. When it is desired to reduce the activity of the sebaceous glands.
 - (a) Seborrhea
 - (b) Acne vulgaris
 - (c) Comedo
 - (d) Acne rosacea
3. When it is desirable to inhibit the activity of the sweat glands.
 - (a) Hyperidrosis
 - (b) Bromidrosis
 - (c) Pompholyx
4. Indirect effect upon bacteria and fungi in dermatophytosis, tuberculosis of skin, acne vulgaris, et cetera.
5. Absorption of inflammatory exudates in such dermatoses as eczema, psoriasis and lichen planus.
6. Destructive effect on new growing radio-sensitive cells, in epithelioma, rodent ulcer, verrucæ, sarcomata.
7. The anodyne effect comes into play in the treatment of pruritic dermatoses, such as pruritus ani, pruritus scroti, and pruritus vulvæ.

From the above therapeutic indications we can see that the field of application for x-ray in dermatology is very extensive. As Pusey states, "It is in fact hardly too much to state that roentgenotherapy is the most widely useful addition to the treatment of skin diseases that has been made."

There are over eighty cutaneous affections that are more or less amenable to x-ray. It is not possible in a discussion of this type to go into further detail, but I merely wish to enumerate some of the skin disorders in which x-ray is most commonly used and in which it gives the best results. Among these are acne vulgaris, epidermophytosis, pruritus ani and vulvæ, neurodermatitis, onychomycosis, and epithelioma.

Radium is a radio-active metal, which emits Alpha, Beta and Gamma rays. The Gamma rays are of primary therapeutic value in dermatology. They are electromagnetic waves of extremely short wave length and have a biologic action similar to x-rays. Radium, therefore, has therapeutic indications similar to x-rays. It is particularly useful in cavities of the body where it can be introduced more effectively and efficiently than x-rays.

On the surface of the skin radium is indicated in many types of cancer of skin, in

precancerous lesions, vascular nevi, keloids, keratoses, verrucæ, keratodermas, leukoplakia and kraurosis vulvæ. Special applicators are designed for the therapeutic application of radium.

Now let us consider ultra-violet. Ultra-violet rays when applied to the skin produce an erythema, several hours after the exposure. This erythema is similar to a sunburn, and varies in intensity, depending upon the duration of the exposure and the distance from the skin. In dermatology the ultra-violet is not used as frequently as it used to be, because its therapeutic effect on the skin is limited. Finsen first introduced ultra-violet in the treatment of lupus vulgaris, that is, a form of tuberculosis of the skin, and it still is a standard form of treatment for lupus. Some institutions also use the ultra-violet in hyperintensive doses in the treatment of erysipelas.

In acne vulgaris ultra-violet merely produces a redness and peeling of the skin, but there is no permanent improvement comparable to the results of x-ray therapy. In alopecia areata and generalized alopecia the ultra-violet has a stimulating effect upon the scalp. In acute eczemas and acute dermatitis the ultra-violet is contra-indicated, because it causes further hyperemia when the skin is already inflamed. The Goeckerman treatment of psoriasis consists of the use of ultra-violet rays in conjunction with crude coal tar ointment.

For their tonic effect ultra-violet rays are very beneficial and thus may indirectly be of value in certain dermatoses, where the patient needs tonic stimulation.

We will now consider electrosurgery, in dermatology, as generated by a high-frequency diathermy machine.

In electrosurgery we recognize three types of current.

1. *Uniterminal or Monopolar Current.*—With this current we produce electrodeiccation. It produces a dehydration or drying out or mummifying of the tissues. The lesion to be treated such as a mole or a wart may be sparked, or the needle may touch the lesion, or it may be introduced into the lesion, depending upon how much destruction we wish to produce. A desiccated crust is usually left at base of lesion as a protective covering.
2. *Biterminal Current.*—Here we have an active electrode and passive body electrode. With this type of current we produce electrocoagulation. It results in the formation of a coagulum in the tissues by boiling them in

their own juices. It produces more destruction than electrodesiccation.

3. *Cutting Current or Acusection or Endothermy.*—It is a special type of current, biterminal in character, and by using the proper electrodes we get a cutting effect with a minimum amount of tissue destruction, and the blood vessels are seared as they are cut, so that there is no bleeding. It may be referred to as bloodless surgery and healing takes place by first intention. This current is ideal in removing malignancies of tongue or breasts or of other organs. This type of current may also be used for removing a biopsy in suspected carcinoma of cervix.

Electrosurgery is indicated in the removal of warts—either the verruca vulgaris or plantar wart—moles, especially on the face and exposed parts of body, seborrheic keratoses, and epithelioma, especially the basal cell epithelioma.

In removing any lesion on the face our chief aim is to get a good cosmetic result. The surgeon may remove a fleshy mole on the face, with the knife, introduce a couple of sutures, and obtain a good surgical result. From the cosmetic standpoint, however, the resulting scar may look as bad, if not worse than the original lesion. By using electrodesiccation there is no bleeding, no sutures are required, and there is healing under a scab, so that there is a minimum of scar formation and we get a good cosmetic result. Of course, local anesthesia is used in connection with electrosurgery.

Another form of physical therapy used in dermatology is electrolysis. It is used primarily for the removal of superfluous hair. It depends for its action on a battery or a galvanic current. The active electrode is the negative pole of the battery, and consists of a very fine needle, which is introduced in the hair follicle, causing a very mild caustic effect by the liberation of caustic alkali, resulting in the destruction of the hair papilla or hair root. Hydrogen is also liberated at the negative pole and we can see little bubbles of hydrogen gas forming at the hair root. It takes fifty to sixty seconds to destroy each individual hair. By employing several needles or multiple electrolysis we can work on five to six hairs at one time. This work has been relegated to the beauty operator, but it really belongs to the realm of dermatology.

By means of electrolysis we can also destroy the telangiectatic vessels which occur in acne rosacea and in the spider nevus.

Hairy nevi can be successfully removed with electrolysis, but the fleshy or pigmented mole is best treated by electrodesiccation.

Hemangiomas or vascular nevi, especially the so-called strawberry marks, which project from the surface of the skin, are treated successfully with carbon dioxide snow. A pencil of carbon dioxide snow the shape of the nevus is applied to the lesion with moderate pressure for fifteen to forty seconds, depending on location and size of nevus. The lesion becomes frozen and blanches, but it thaws out in a couple of minutes and a blister forms in several hours, which ruptures later and a scab forms. In one or two weeks the scab falls off, reducing the size of the hemangioma. Applications are repeated at monthly intervals until the nevus is level with the skin, and it has lost its red color. About three or four applications are usually required, and the cosmetic results are very good. These hemangiomas should be treated during the first six months of life.

In the last few years hyperpyrexia has been used in the treatment of certain chronic dermatoses such as generalized psoriasis, eczema and dermatitis herpetiformis. Artificially induced fever, of course, has been used successfully for a long time in neurosyphilis, and its use in dermatoses is comparatively recent.

Some spectacular results have been reported in the literature following the use of hyperpyrexia in these chronic dermatoses. For example, a case of generalized psoriasis cleared up following one treatment, and it is well known how resistant psoriasis can be. Similar results have been obtained in other dermatoses. Due to the fact that hyperpyrexia has been so recently introduced in dermatology we cannot as yet estimate its full value. Special cabinets are used for the induction of the artificial fever.

In this paper I have given you an outline of the various modalities that we use in the treatment of skin disorders. We have mentioned x-rays, radium, ultra-violet, electrosurgery, electrolysis, hyperpyrexia and refrigeration. This will give us some conception of the importance of physical therapy in dermatology.

References

- Andrews, G. C.: Diseases of the Skin.
MacKee, George M.: X-rays and Radium in the Treatment of Diseases of the Skin.
Pusey, W. A.: Diseases of the Skin.

THE JOURNAL

OF THE

Michigan State Medical Society

PUBLICATION COMMITTEE

A. S. BRUNK, M.D., Chairman.....Detroit
 HOWARD H. CUMMINGS, M.D.....Ann Arbor
 ROY H. HOLMES, M.D.....Muskegon
 VERNON MOORE, M.D.....Grand Rapids

Editor

J. H. DEMPSTER, M.A., M.D.
 5761 Stanton Avenue, Detroit, Michigan

Medical Secretary

L. FERNALD FOSTER, M.D.
 Bay City, Michigan

Business Manager

WM. J. BURNS, LL.B.
 2642 University Avenue, St. Paul, Minnesota
 or
 2020 Olds Tower, Lansing, Michigan

OCTOBER, 1936

*"Every man owes some of his time to the up-
 building of the profession to which he belongs."*

—THEODORE ROOSEVELT.

EDITORIAL

AN IMPORTANT HEALTH MEASURE

THE trend in institutions teaching the healing art has been towards a very marked reduction of their number. Schools teaching regular medicine have decreased in number from 162, in 1906, to 76, in 1932. In 1920, there were thirteen osteopathic schools in the United States; in 1927, eight. In 1900, there were 79 colleges teaching chiropractic. Seven years later, the number was reduced to forty. From 1920 to 1927, the number of institutions teaching naturopathy was reduced from 20 to 12. Of optometry during the same period the reduction was from 18 to 8. This decrease has been, for the most part, on the principle of the survival of the fittest. The proprietary institution, of course, suffers in favor of the endowed or state owned college. With the advances in the medical and allied sciences, medical education has become a costly matter which it is impossible to finance by students' fees alone, which at one time constituted the sole support of the proprietary school. The body of medical knowledge has become so great that the untrained mind cannot begin to grasp it. During the period mentioned, in medicine, there has been a tendency towards higher standards, not only of professional, but likewise of pre-professional education. Thirty years ago, the standard for admission to a medical college consisted of not more than a high

school education or its equivalent which was not scrutinized any too closely.

* * *

It is doubtful at the present time if any of the applicants for the study of medicine or dentistry have had as few as two years in college, after a full high school course—not its equivalent. A very large percentage in this state have secured a college degree, usually a B.A. or B.S., before entering the study of medicine. According to the educational number of the *Journal of the American Medical Association* (August 29), the entire graduating class of the Wayne University Medical School had college degrees. Of the University of Michigan Medical School of 116 graduates, 90 held other degrees. All this is mentioned to show the tendency towards a greater thoroughness and keener selection in the matter of medical students.

* * *

At the next session of the Michigan legislature will be introduced a bill known as the Basic Science Act, the purpose of which is to elevate the standard of training for all who would seek to practice the healing art. It is axiomatic that the more thorough a person's training before he enters upon any course of study, whether it be medicine, law or engineering, the more he will get from his professional course. It is according to an old law, to him who hath, to him shall be given. In other words, there are certain subjects as physiology, chemistry and anatomy, pathology and bacteriology as well as public health and hygiene which everyone should know if he essays to treat the sick at all. This is the irreducible minimum of medical knowledge. This is clearly obvious to any physician or dentist. A thorough training in these subjects should make a better doctor or a better osteopath, chiropractor or naturopath, or what have you, than he could possibly be without this knowledge. These subjects are to be taught in regular institutions recognized by higher educational departments of the state, and, since they are purely academic and not clinical or practical subjects in connection with the healing art, the examiners will be teachers who are not, in any sense, engaged in the actual practice of any system of healing. There is no attempt to attack any system of healing. The cults have their own examining and licensing boards. This condition is accepted. Public policy, however, demands certain requirements in

the interest of public health. A chiropractor or a naturopath called to see a sick child must be able to recognize such infectious diseases as scarlet fever or diphtheria. Hence hygiene and public health. Anyone licensed by whatever law to treat the sick must be able to recognize smallpox or typhoid and to take proper procedures for quarantine. The interests of the health of the people demand this much. There might be some excuse for laxity in this before the cults were granted licensing power. Since they have been legalized, a greater responsibility rests upon the legislature to see that they are progressive and alive to the public interests. And here the long range view is all-important. Those who enter upon the study of medicine and the non-medical modes of practice should possess the minimum qualifications aimed at in this, the most far reaching and effective public health measure of over three decades.

* * *

It should be understood clearly that the Basic Science Law is not retroactive. It does not and can not affect the standards of any physician or dentist or osteopath or chiropractor, now licensed by the various licensing bodies of the state. This cannot be made too plain. It is a movement, the object of which is to improve the healer of the future, no matter what school he elects to attend. Since it is in the interests of existing practitioners of all schools or cults to maintain high standards, there can be no reasonable opposition to the passage of this bill. Similar laws have been enacted and are working satisfactorily in eleven states of the Union. In some of these states, they have been actively supported by osteopathic practitioners who are looking towards the future. The Basic Science Law is a measure in the interest of public and private health of the future. It affects the welfare of the regular practitioner of medicine even less than it does the public. When doctors have illness in their families, they know where to turn to get the best and the most satisfactory medical care. As a rule, they have been able to choose wisely. Their intimate knowledge of medicine as well as their intimate acquaintance with their confreres enables them to choose medical care and to choose it wisely.

* * *

While the medical profession do not wish to pose as altruists, they feel that since they are licensed by the state to practice, the license is a trust which must be exercised

in the public interest, the same as a qualified engineer feels it his duty to advise in matters of sanitation. While the adoption of the Basic Science Law might not be productive of immediate results, its value as a health measure for the future cannot be overestimated.

TAXATION

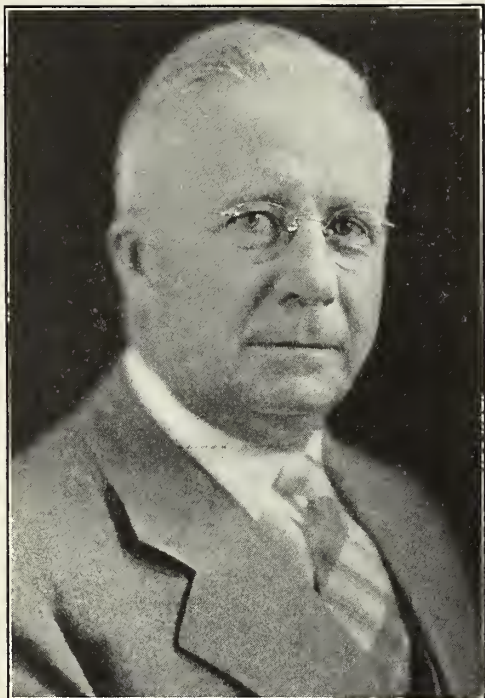
THIS JOURNAL has avoided taking sides in a political sense, and will probably continue in this policy. There are some things, however, that appeal to the doctor as a citizen, if not in his professional capacity, and one of these is taxation. There is no denying the necessity of taxes if we are to have government at all. Everyone must pay willingly his share. However, good government need not be excessively expensive government. A movement is on foot in this state to abolish the tax on real property and to institute a state income tax. This is wholly bad from the doctor's point of view. It is said, on good authority, that approximately only 2 per cent of the population of the United States pay income tax; that means that 98 per cent partake of the benefits of government, which they do not support directly from their income. To abolish taxes on real property and substitute a state income tax would place an extra burden on those already meeting such a tax. Many people never determine, accurately, their incomes. For instance, what the urban resident works for and pays for directly out of his income, namely, his food and fuel, and habitation, the majority of gardeners and farmers do not realize as part of their income. An income tax would hit only those who have a definite income either by salary or who are accustomed to an accurate system of book-keeping such as professional persons and those in business are bound to observe.

Taxation should be fair and equitable if it were shared by all who exercise the right of suffrage. If all who partook of the benefits of good government shared in the expense of good government, there should be no injustice. The sales tax appears to be a satisfactory tax because it is shared by all and burdensome on none.

To repeat, taxation is a necessity. We must have taxes if we are to have government—municipal, state or national. Let them be equably distributed. This cannot be done by shifting them from one class to another.

THE ANNUAL MEETING

The Seventy-first Annual Meeting of the Michigan State Medical Society has come and has gone. From every point of view, it was one of the most notable annual meetings in the history of the society. The weather was favorable to a large attendance,



H. E. PERRY, Newberry
President of the Michigan State Medical Society

For account of Dr. Perry's professional career, see October, 1935, JOURNAL MICHIGAN STATE MEDICAL SOCIETY.

for large numbers came by automobile. Favorable was the weather, also, for the afternoons for golf and for baseball, which claimed the more sedentary members.

The Executive Committee and the Council held sessions on the afternoon of September 20. The House of Delegates met on the 21st and 22nd of September. An innovation that greatly facilitated the transaction of the House of Delegates was the hand-book containing the reports of standing committees, which reports were placed in the hands of the delegates several days before the meeting, which gave the delegates more time for consideration of these reports.

A verbatim report of the deliberations of the House of Delegates will appear in the November number of the JOURNAL of the Michigan State Medical Society.

Among the important items endorsed by the House of Delegates is the Basic Science Law, which has received the major attention of the legislative committee during the past year.

Dr. Henry Cook of Flint was elected President-elect. Dr. Cook has been a member of the council for the past nine years and for the past year he



HENRY COOK, Flint
President-elect, Michigan State Medical Society



PAUL R. URMSTON, M.D., Bay City
Chairman of the Council and Executive Committee of the Council, Michigan State Medical Society

Dr. Urmston graduated from the University of Illinois in 1903. He came to Michigan in December, 1908, and has limited his practice in Bay City since that time to the care of eye, ear, nose and throat diseases. Dr. Urmston has been a member of the Council representing the Tenth District since 1926, having been elected at the meeting at Mackinac Island.



PAST PRESIDENTS OF THE MICHIGAN STATE MEDICAL SOCIETY

Upper row, left to right: Grover C. Penberthy, Detroit (1935-36); George Le Fevre, Muskegon (1933-34); Richard R. Smith, Grand Rapids (1934-35); L. J. Hirschman, Detroit (1927-28); J. D. Brook, Grandville (1929-30); J. M. Robb, Detroit (1931-32); J. B. Jackson, Kalamazoo (1926-27); H. E. Randall, Flint (1926-27).

Lower row, left to right: Guy Connor, Detroit (1923-24); C. H. Baker, Bay City (1919-20); A. P. Biddle, Detroit (1916-17); Reuben Petersen, Duxbury, Massachusetts (1914-15); A. M. Hume, Owosso (1918-19); Angus McLean, Detroit (1920-21).

has been chairman of the council and executive committee of the council. Dr. Cook is not only thoroughly familiar with the work and aims of the society but he has very exceptional ability in the way of expressing himself, not only in the councils of the profession, but in the necessary relations with prominent lay members of the state. Dr. H. E. Perry was inducted as president for the year 1936-37. Dr. Perry has had many years of experience in the practice of medicine and is particularly well informed in regard to the medical situation in smaller communities of the state. Dr. Perry has spent one session in the House of Representatives of the state legislature, which will especially qualify him for the presidency. At a noon luncheon during the convention, he outlined his policy and expressed his attitude as opposed to radical change in the personnel of standing committees who were already functioning satisfactorily.

Of the councillors, Dr. H. R. Carstens of Wayne, whose term had expired, was reelected. Dr. F. T. Andrews of Kalamazoo was elected for the fourth district, and Dr. R. H. Holmes of Muskegon succeeds Dr. Treynor as councillor for the eleventh district; Dr. I. W. Greene of Owosso, the sixth, to succeed Dr. Cook, who was made president-elect, and Dr. Vernon Moore, the fifth. Dr. Paul R. Urmston of Bay City, councillor for the tenth district, was elected chairman of the council and of the executive committee of the council. Drs. H. A. Luce and Thomas K. Gruber of Wayne, J. D. Brook of Kent, and Claude Keyport of Grayling, were elected as delegates to the House of Delegates of the A. M. A. Alternates were elected as follows: Drs. T. E. DeGurse of Marine City, D. S. Gorsline of Battle Creek and R. H. Denham of Grand Rapids.

Dr. C. T. Ekelund, who served as medical secretary during the past year, tendered his resignation and has been succeeded by Dr. L. Fernald Foster of Bay City. Dr. Ekelund was elected secretary of the society a year ago. He has proved himself very efficient and the success of the annual meeting

was due in large measure to the efforts of both Dr. Ekelund and Mr. Burns. Dr. Ekelund has decided to devote all his time to his practice. Dr. Foster, as chairman of the Committee on Public Relations, has devoted himself unstintingly to the efforts of the society for the past year. He is a tireless worker. He has a large acquaintanceship among the medical profession of the state.

Dr. Frank E. Reeder of Flint and Dr. Philip A. Riley of Jackson were reelected speaker and vice speaker of the House of Delegates.

The general sessions of the society opened on the evening of the twenty-second, with an address by Dr. Charles Gordon Heyd, vice president of the A. M. A. Dr. Penberthy acted as chairman.

Following the address of Dr. Heyd, an entertainment was given, consisting of musical numbers, as well as a performance by a magician in the large ballroom of the Book-Cadillac Hotel. This, in turn, was followed by a buffet luncheon. Dr. Martin Hoffman was master of ceremonies on behalf of the hosts, the Wayne County Medical Society.

The president's night was held on the 23rd of September, when, preliminary to the evening program, a dinner was given in honor of the living past presidents of the Michigan State Medical Society. Dr. Reuben Petersen, formerly professor of gynecology at the University of Michigan, now a resident of Duxbury, Massachusetts, was the only out-of-state member of the past presidents. He received a hearty welcome to which he responded in a brief address.

The evening's program began with several selections by the Wayne County Doctors' Symphony Orchestra. The presentation was exceedingly well received and much credit goes to the members of the orchestra as well as to their leader, Mr. Georges Miquelle. The musical program was followed by the address of the president, Dr. Grover C. Penberthy, whose address appears in full as the leading paper in this number of the JOURNAL. Then followed the induction into office of the president-elect, Dr. H. E. Perry of Newberry, who made a suitable

EDITORIAL

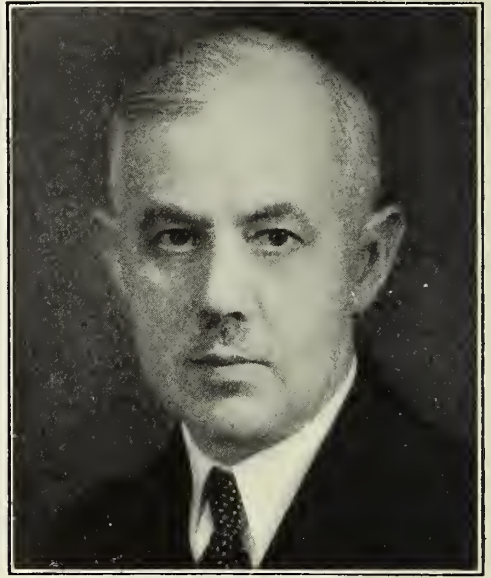
response. The new officers were introduced and following this was the presentation of awards to prize-winning scientific exhibitors. The committee appraising the exhibits awarded first prize to Dr.

tained at a luncheon on the 23rd by the Blackwell Society of Detroit. A noon luncheon meeting was addressed by Dr. Mary Thompson Stevens, Dr. Suzanne Sanderson and Dr. Jean Solis of Detroit.



HENRY R. CARSTENS, M.D., Detroit

Dr. Carstens was reelected councillor of the First District. He is chairman of the Finance Committee.



I. W. GREENE, M.D., Owosso

Dr. Green was elected councillor of the Sixth District to succeed Dr. Henry Cook, who was made president-elect.

R. A. MacArthur's exhibit on Hematuria; second prize to Dr. R. C. Connelly, Findings in Gastritis; and third prize to the exhibit by Drs. J. C. Kenning, O. A. Brines, J. E. Lofstrum and H. L. Weitz of the Receiving Hospital, Detroit, on Primary Carcinoma of the Lungs.

The following exhibitors were awarded honorable mention. Varicose Veins, Dr. Eugene A. Osius, Edwin H. Lauppe and C. N. Weller; The Background of Acute Asthma, Dr. J. Milton Robb; Surgery of Childhood, Drs. Grover C. Penberthy, and C. N. Weller, Children's Hospital; The Present Status in the Treatment of Peptic Ulcer, Dr. David J. Sandweiss.

Following the president's address, the annual Andrew P. Biddle Oration was given by Dr. George Crile of Cleveland. Dr. Crile's address will appear in the November number of this JOURNAL.

A noteworthy feature was the hobby exhibit sponsored by the Woman's Auxiliary to the Michigan State Medical Society under the chairmanship of Mrs. Milton D. Vokes. The exhibit, this year, consisted not only of original work, but also of collections made by members of the society and their wives and families. This is the first hobby exhibit that has been held. It is hoped that it will be continued and will be made a regular feature of the annual meetings. In the future, original work in the broadest sense should be placed on view.

The Michigan branch of the Medical Woman's National Association held its annual meeting in Detroit during the seventy-first annual meeting of the Michigan State Medical Society. Dr. Catherine Bryan of Manistee, Michigan, was elected president to succeed Dr. Bertha Selmon of Battle Creek, and Dr. Mary Margaret Frazer of Detroit will act as secretary-treasurer. The state society was enter-



F. T. ANDREWS, M.D., Kalamazoo

Dr. Andrews succeeds Dr. C. E. Boys as councillor of the Fourth District.

Registration of physicians at the seventy-first annual meeting was only a few less than 1,800. This is, by far, the largest registration at an annual meeting of the Michigan State Medical Society.

The date and place of the next annual meeting will be decided upon by the Council and announced after the annual meeting in January, 1937.

**DR. L. FERNALD FOSTER,
SECRETARY OF THE MICHIGAN
STATE MEDICAL ASSOCIATION**

Dr. L. Fernald Foster of Bay City succeeds Dr. C. T. Ekelund as secretary of the Michigan State Medical Society. Dr. Foster was born in Philipsburg, New Jersey, in 1891. Following his early



L. FERNALD FOSTER, PH.B., M.D.
Secretary of the Michigan State Medical Society

education in the schools of his native town, he entered Lafayette College, where he was graduated Bachelor of Philosophy in 1913. He entered upon the study of medicine at the University of Pennsylvania, where he was graduated M.D. in 1918. Dr. Foster served his internship in the Children's Hospital of Philadelphia, and the Presbyterian Hospital of Philadelphia, where he was also chief resident physician. He also pursued postgraduate work at the University of Pennsylvania.

Dr. Foster has practiced in Bay City since 1920, where he has confined his work to pediatrics. In addition to the county, state and national medical societies, he is a member of the American Academy of Pediatrics and he holds the diploma of the national board of examiners. Dr. Foster's non-medical organizations include Kappa Sigma, Alpha Kappa Kappa, Rotary Club, Masons and Elks. He has been secretary-treasurer of Bay County Medical Society since 1920 as well as permanent delegate from Bay County to the House of Delegates of the Michigan State Medical Society.

Dr. Foster, as is well known, has served on numerous committees of the Michigan State Medical Society. He has rendered signal service, the past year, as chairman of the Public Relations Committee. During the past year he has visited seventy-four of the eighty-three counties of the state. During this period, his speedometer has registered 9,910 miles in the interest of the medical profession of the state. Dr. Foster possesses a genius for organization work, perhaps the greatest social medical necessity at the present time. Dr. Foster is married. The children are a daughter, aged fourteen, and a son, eleven years old.

**A MOMENT OF
MEDICAL HISTORY**

INTRAVENOUS INJECTION

By WILFRID T. DEMPSTER, Sc.D.

ABOUT thirty years after the publication of Harvey's studies on the circulation of blood, some of the founders of the Royal Society of London attempted a study of the effects of various substances injected into the blood stream of animals. True, the injection of medicines had been suggested by Giovanni Colle in 1628. Likewise, Francesco Folli in 1652 had discussed the possible therapeutic value of intravascular injection, but no one had actually tried to add drugs to the circulating blood.

Christopher Wren, astronomy professor at Oxford and famous architect, suggested a technic of injection to Robert Boyle in 1656. With the help of Boyle and Wilkins, Wren began a series of experiments on dogs. A ligature was placed around a vein, the vessel was opened central to the ligature and with a quill having a small bladder attached, fluids were injected intravenously.

When wine or ale, the principal fluids used, were injected into the blood of living dogs, the animals became drunk and stupefied. Experiments of this type were not infrequently tried both at Oxford and at London before a group which became the Royal Society in 1662.

In 1657, a foreign ambassador to the English Court, who was interested in Wren's experiments, turned over to him a malefactor who had been in his employ as a servant. Wren intended to inject vinum emeticum, but when the man fainted of fright, the experiment was discontinued. It was almost a decade later before human injections were actually tried.

Carolus Fracassatus of Pisa made experiments on animals injecting aqua regia and sulphuric acid. The animals died immediately in violent convulsions, and the blood became coagulated. Wepfer found that the injection of air into the vein of an ox resulted in the death of the animal. The same results were obtained by Francesco Redi when he injected air into the veins of dogs, a hare, a sheep and two foxes.

Animal experiments on the infusion of medicines into the blood stream were per-

formed by Johann Daniel Major in 1664. He found that opium made his animals insensate; acids coagulated the blood; sulphurette of antimony caused violent vomiting and death; arsenic and corrosive sublimate injections also resulted in death. Potassium nitrite, however, was introduced without effect. Major pointed out that injections of the jugular vein were more likely to be fatal than injections into other veins. He performed a human injection, but no details are available. Major believed that disease was due to some property of the blood which prevented sweating, a natural curative property of the body. He thought that injection of the proper medicines should produce sweating and the dissipation of the disease.

About the same time, Caspar Schottus found that tincture of gamboge caused diarrhea. Wine, as in the English experiments, caused drunkenness and stupor. Ettmüller injected spirit, water, opium, tartar emetic and other drugs into animals. He believed that injection of medicines should be of wide practical application.

Johann Sigismund Elsholz was also of the opinion that injection should be a real aid in diseases such as scurvy and syphilis which were due to impure or corrupt blood. Elsholz injected water, Spanish wine, opium, purgatives and emetics. His experiments on dogs showed different pharmacological responses for various drugs. The monograph which Elsholz published in 1665 tells of the successful treatment of a syphilitic soldier by an injection of aqua plantaginis. Two other soldiers were treated for fever by the intravenous injection of *cardis benedictus*, also with success.

In Elsholz's little book, figures demonstrating the technic of injection show that syringes were used for injections as well as the tubes and bladders used in the early experiments of Wren. These latter were figured in Major's publication. It was by this time, a decade after the first injections, that Lower had performed his animal transfusions. Denys likewise had made experiments on the transfusion of blood into humans. Transfusion and intravenous injection came to be considered as mere modifications of one technic. After a decade or more of injection by various enthusiasts, the efficacy of the method began to be questioned. Even Timothy Clarke and Major entertained doubts as to the practical utility

of the method. It was obviously dangerous from the standpoint of infection and air embolism, and, as a therapeutic measure, there were no obvious advantages over oral administration.

The bad results of early transfusion due to incompatible bloods, infection and inadequate surgical technic were reflected indiscriminately upon intravenous injection as well. Consequently, the technic of injection fell into disuse. At most, it had been merely a method of introducing drugs by a route other than the oral. The conception that "bad" blood might be rectified by appropriate drugs was not borne out in practice. Pharmacological knowledge of the time was too rudimentary for effective selection of drugs even were they available. Animal experiments ordinarily gave no information beyond the fact that certain drugs caused death; others purged or caused vomiting; and still others were without effect.

In 1683, Matthieu Purmann believed that some cases, such as epilepsy and fever, might respond favorably to the injection treatment. He listed a score of drugs that had been used in intravenous therapy during the preceding twenty-five years. The technic, however, had fallen into disrepute by this time. Only a few men continued to perform injection experiments to the end of the century.

Throughout the eighteenth century, intravenous injection lay dormant as a therapeutic measure. In some places, the practice was illegal. Occasional men, nevertheless, such as Freind, Sprengel, Hermann and Regnaudot, experimented with the method, but there was no widespread interest as formerly. A technic of injection of ammonia for snake bite became of transient interest. Fontana, in 1782, related his experiences with the method. It was somewhat after this time, however, before there was a revival of interest in intravenous injection.

During the second decade of the nineteenth century, the practice of intravenous injection was revived, particularly in France, by Nysten, Orfila and Baron Percy. In the early 1820's, a number of men, among them Magendie, the physiologist, took up the technic. It was used in preference to oral administration as a method of avoiding possible digestive action on drugs and as a way of obtaining speedy absorption of drugs.

The danger of injecting air into veins was reaffirmed by Nysten and by Dieffenbach. Gaspard showed that oily injections were impractical. Daniel conducted experiments on the injection of water, wine, pus and poisons. Magendie, in studying the pharmacological action of opas, nux vomica, prussic acid and ipecacuanha, found in intravenous injection a method to supplement oral administration or the rubbing of poisons into mucous membranes.

Magendie also injected opium into rabid dogs and into normal ones, demonstrating that more drug was required in the diseased animals for narcosis than in normal animals. He attempted the treatment of human cases of hydrophobia by injection, but with little success. Magendie also treated cases of cholera with injections of alcoholic solutions of camphor, but again without success. Coindet treated a girl for hysterical fits by injection of opium. Baron Percy treated cases of tetanus with opium and with stramonium with apparent success.

After little more than a decade of intravenous injection of drugs by various men, the technic was admittedly of minor importance in therapy. It remained, however, as a standard procedure in physiological laboratories where Magendie, Claude Bernard, James Blake and others found it useful. As a therapeutic measure, the injection of drugs was continued in cholera, tetanus and hydrophobia more or less as a last resort till the latter part of the nineteenth century.

In another respect, the injection technic was of some value. The so-called "massive injection" of saline solutions was useful in reviving patients after collapse in cases of malignant cholera. An English physician, Thomas Latta, in 1832, initiated the procedure. On finding in an account of the pathology of cholera by O'Shaughnessy that there was extensive loss from the blood of both water and salt, he thought it feasible to replace these materials by intravenous injection. Latta injected a solution consisting of six drams of muriate of soda, two scruples of subcarbonate of soda and six pints of water. Two or three quarts of solution warmed to 112° F. were injected with a Read's patent syringe. The injection increased the blood volume and elicited stronger respiration, heart beat and pulse. The injection, however, had to be repeated several times within twenty-four hours.

The procedure was immediately advocated by Robert Lewens, Thomas Cragie and others in England. As the technic spread to the continent and America, sodium phosphate and sodium sulphate were sometimes added to the saline solution. The percentage of salt was likewise altered though it usually amounted to 3 per cent or more (a hypertonic fluid). Intravenous injection of saline was limited to cholera and its use depended largely on the presence or absence of cholera epidemics. Though the method was used till the 1850's, it was at last practically abandoned.

Further progress in saline injection came after studies had been made on the physiological activity of the solutions. In 1869, Cohnheim injected frogs with a solution of 0.75 per cent sodium chloride, a fluid used by histologists. All the blood was washed out of the vessels and saline solution was substituted, yet the frogs remained alive two or three days. Ten years later, H. Kronecker and J. Sander bled dogs till the heart beat was weak. A quantity of 0.6 per cent saline solution equal to the blood loss was then injected with an ensuing stronger heart beat. Jolyet and Laffond similarly in 1879 found the same effect in injecting saline into exsanguinated animals.

E. Schwarz in 1881 carried the experiments further. He removed various amounts of blood from dogs and rabbits, each time a definite proportion of the body weight. An equivalent amount of 0.6 per cent saline (slightly alkaline) was then substituted. Dogs lacking as much as two-thirds of their blood could be revived by the procedure. Thus, it was demonstrated that for an animal to survive, a certain minimum amount of blood (i.e., minimum number of red corpuscles) was necessary and that the blood vessels should be adequately filled. Bischoff confirmed Schwarz, and Ott carried the experiments further making cell counts after injection of saline, horse serum, dog serum, whole blood and defibrinated blood.

The demonstration of the efficacy of saline injection as a substitute for blood transfusion in cases of hemorrhage in which there was no great corpuscle loss resulted in the surgical application of saline injection. C. Roux, a Swiss, in 1884, was one of the first to use the technic in clinical cases of anemia, hemorrhage and collapse. During the 1890's, saline injection became increasingly popular with surgeons. Lewis

Pilcher and Mayo Robson among others advocated the method. The Colins transfusion apparatus consisting of a funnel, rubber tubing and canula was popular for infusing saline into veins. Physiological experiments by Bose and Vedel in 1896 demonstrated that 0.7 per cent saline was better than five or six parts per thousand. Ringer's solution was also used.

In Crile's studies in resuscitation of patients in surgical anemia and shock, in 1909, adrenalin was used with salt solution. During the World War, experiments with saline solutions in shock were somewhat disappointing. An initial rise in blood pressure was followed by a serious drop. Saline solutions were found defective because their viscosity was too low and because they contained no colloid with an osmotic pressure. William M. Bayliss in 1916 and 1918 related various physiological experiments on saline solutions to which were added glucose, gelatine, dextrose or gum arabic. The last material, gum arabic, to a concentration of 6 or 7 per cent in 0.9 per cent sodium chloride was found to have the viscosity of the blood and the osmotic properties of its colloids.

Back in the middle nineteenth century, the injection of milk had been suggested as a substitute for blood transfusion by Edward M. Hodder of Toronto. He used milk injection in cases of cholera. Somewhat previously, Donne had injected milk into dogs and rabbits without injury. The method, however, was not used again till 1875 when Joseph Howe injected a tubercular patient with goat's milk but without effect. Three years later, T. Gaillard Thomas was impressed by the chemical and physical similarities between chyle in the thoracic duct and milk. If, he thought, chyle was normally poured into blood as a nutritive and blood forming substance, it was likely that milk injected intravenously would be of equal value in clinical use. He injected cow's milk in several cases, using an infusion apparatus consisting of a funnel and canula connected by rubber tubing. The method was recommended for the treatment of cholera, pernicious anemia and typhoid fever. John Brinton also in 1878 reported successful cases of milk injection. Howe, on the other hand, after experiments with the injection of both cow's and human milk, condemned the practice. Nevertheless, the treatment spread to Europe. Charles Jen-

nings in England was particularly enthusiastic about the method. He believed it would shortly supplant blood transfusion entirely. During the injection of milk, disagreeable symptoms were encountered, and when saline injection became popular about 1885, the technic of milk injection was abandoned.

In addition to saline and milk injection, some activity during the 1870's was devoted to other types of injection therapy. G. B. Halford in 1869 made animal experiments on the injection of quinine and carbolic acid and suggested possible therapeutic uses of the method. He also injected ammonia in snake bite and precipitated a controversy which lasted for several years. In certain types of snake bite, the method seemed of value while in others it had little effect. At any rate, the stimulating effect of ammonia injection was apparent. Accordingly, ammonia was injected as a stimulant in cases of poisoning by chlorodyne, chloroform, alcohol and carbolic acid.

Oré in 1874 injected chloral instead of opium in tetanus, finding that the spasms disappeared and a deep anesthesia was produced. Though the value of chloral in tetanus was not evident in subsequent injection, the hypnotic properties of the drug were used for a year or two in surgical operations. Soon, however, it became evident that the drug was not a true anesthetic and was dangerous.

Intravenous therapy, apart from the injection of fluids for the purpose of maintaining a suitable blood volume, was dependent upon developments in the field of bacteriology and pharmacology. The demonstration of a bacterial cause of a disease allowed a rational approach to intravenous therapy. The absence of such an approach was the factor which was responsible for the lack of significant progress during the seventeenth century and in the early nineteenth century. With the demonstration of a causative organism of disease, two courses were open: either to inhibit the organisms and prevent their multiplication by antiseptic agents or to aid the body to resist the infection. These became the cardinal principles of modern intravenous therapy.

The ordinary method used by bacteriologists was the inoculation of a rabbit or other laboratory animal with some organism and the subsequent injection of a solution of antiseptic hypodermically or intravenously.

The value of treatment in this manner was determined by comparison with the course of disease in an inoculated but untreated animal. Cash in 1884 tried to protect rabbits from anthrax by the hypodermic injection of sodium sulphocarbolate, but with negative results. He obtained better results by injection of dilute mercuric chloride, though in contradiction with results of Koch and Behring. As another method of attempting to control anthrax, Behring in 1887 injected hypodermically silver oxide dissolved in pentamethylendiamin. Toxic doses of drug seemed to limit somewhat the infection in laboratory animals, but more dilute solutions seemed to augment the infection. This latter effect had also been claimed for mercuric chloride in dilute solutions. Washbourn in 1888 used creolin hypodermically for anthrax in experimental animals, but it did not prevent death of animals. During the 1890's and early twentieth century, a number of animal experiments were made with different infectious organisms and with injections of mercuric chloride or other antiseptics.

Bacelli in 1890 treated a group of malaria cases with intravenous injections of quinine maintaining that this method was superior to hypodermic injections. He then turned his attention to injections in syphilis. After a period of animal experimentation with mercuric chloride, Bacelli in 1893 used this drug intravenously in syphilis with encouraging results. Improvement was demonstrated in a number of cases. As the technic became more widespread, controversies as to the value of the method arose. Nevertheless, the technic continued in use. Though the value of mercury in syphilis, like quinine in malaria, was doubtless specific in its action, Bacelli and his followers, impressed with the bactericidal nature of mercuric chloride *in vitro*, believed that the drug would be of value in a number of diseases. It was applied in meningitis, rheumatism and even cattle diseases, but with results of controversial value.

Cyanide of mercury was used in injection in 1896 by Ernest Kane and later used by Maguire. A difficulty with this drug as with most antiseptics was the toxic property of the antiseptic agent when used in sufficient concentration to affect microorganisms. Maguire, after various experiments, in 1901 used dilute formaldehyde solutions in injection, particularly for cases of tuber-

culosis. This method together with protargol injection, introduced by Ewart (1901) was promising.

Credé of Dresden in 1901 studied the bactericidal properties of metals and developed a technic on animals for injecting silver salts, ordinarily the citrate. This was superseded by a colloidal form of the metal (collargol) which was used in injection treatment of arthritis, rheumatism, phthisis and other conditions.

While antiseptics were used intravenously, attention was likewise given the injection of drugs designed to build up body resistance to disease. After a period of injecting balsam of Peru, Landerer in 1892 prepared an emulsion of the active principle, cinnamic acid. This drug, used in tuberculosis, caused a great increase in polymorphonuclear and eosinophilic leukocytes. Though results were encouraging, the drug was replaced by the more soluble and more easily sterilized sodium cinnamate in 1893. The injection of this drug, known also as hetol, according to a number of users was an efficacious treatment in tuberculosis though animal experiments did not permit the same interpretation. Nevertheless, the method was extensively used in the treatment of tuberculosis during the 1890's and early 1900's.

Preparations of arsenic came into use in intravenous medication with Huxheimer's use of arsenous acid in 1897 for treatment of patients with psoriasis. But the disagreeable symptoms occurring at injection led to abandonment of the method though it seemed efficacious. Sodium cacodylate was introduced by Gautier in 1899. Because of the relatively non-toxic properties of the drug, it seemed a successful method of introducing arsenic into the body. Widal in 1900 found that the number of red blood corpuscles in the blood was rapidly increased by injection of the drug. The practical importance of the drug was considered differently by various users.

Intravenous medication entered a decidedly modern phase with the development of practical methods of chemotherapy by Ehrlich. In 1902, an aromatic compound containing arsenic and known as atoxyl was introduced and was shown by F. Blumenthal to be relatively non-toxic. The next year, Ehrlich and Shiga studied the bactericidal value of the drug *in vitro*, but on obtaining negative results abandoned the

drug. Two years later, Thomas and Breinl adapted atoxyl successfully to the treatment of trypanosome disease. The value of such treatment was demonstrated by Robert Koch, who found a diminution of trypanosomes within a few hours after injection. After the demonstration of the spirochete of syphilis by Schaudinn, atoxyl was used in syphilis therapy. By this time, Ehrlich had resumed his studies on the drug. With the chemist Bertheim, he determined the structure of the compound and set out to modify it chemically with a view of making the drug less toxic, yet certain in its spirillicidal value. Various modifications of atoxyl were made and tested on spirochetal or trypanosomic diseases. In 1906, a compound known as arsacetin was introduced by Ehrlich and tested by Lassar, but this compound was little better than atoxyl. Arsenophenylglycin, known in Ehrlich's series as number 418, received variable reports when tried on tropical trypanosomic diseases. Uhlenhuth and others simultaneously studied various arsenic compounds, atoxylate of mercury, hectine and soamin, but no wholly successful compound for injection appeared. The drug sought for was one which would have a specific effect in inhibiting pathogenic organisms, yet which would be non-toxic to the patient.

In 1909, Bertheim prepared diamidodioxarsenobenzol which was known as test material "606." Ehrlich and Hata studied this chemical and found it highly successful in animal experiments on trypanosomic disease. Some material supplied to Professor Alt was tried during 1909 on clinical cases of syphilis. This material of Ehrlich and Hata, known as "606," arsphenamin or salvarsan was extensively and successfully used in treatment after 1910. A further improvement came in 1911 with Ehrlich's introduction of neoarsphenamin, test material "914," which was neutral, easier to administer and caused less discomfort.

At first, such substances were injected subcutaneously or intramuscularly, but in a short time, intravenous injection became the standard procedure. For this purpose, a syringe with a sharpened needle was used for puncturing a vein and injection.

The war period and the subsequent 1920's saw a widespread use of chemotherapy which soon spread to include intravenous injection of almost any drug to obtain rapid and certain pharmacological action.

Bedside Teaching: Consideration of the Patient's Emotional Response to Case Discussion

According to Eugen Kahn and Grover F. Powers, New Haven, Conn. (*Journal A. M. A.*, Aug. 29, 1936), the use of the hospital ward and dispensary as the laboratory for the teaching of clinical medicine is a procedure with ancient and approved lineage—a descendant of the master-apprentice relationship which probably antedates formal academic disciplines. In the United States, teaching in the medical schools was for many years largely by lectures and recitations. To Abraham Jacobi (1830-1919), nestor of American pediatrics, great credit is due for early attempts to break away from this method and establish clinical teaching in its laboratory—the bedside. However, it was with the launching of the Johns Hopkins Medical School in 1893 and the impetus given to educational procedures by the example and success of William Osler that clinical clerkships and bedside conferences were established as the *sine qua non* of clinical instruction. There can be no question of the essential value to the clinical student of teaching at the bedside. There the teacher-physician has the opportunity to observe his patient and convey his observations immediately to his student or apprentice; there the teacher can make his student or apprentice familiar with his methods of examination and the student is able to examine the patient under the direction and control of his teacher. It is quite understandable that this technic would develop differently in the hands of different teachers. Even if the teaching physician understands perfectly his primary responsibility of helping his patient, as a teacher he also has another task; namely, to use his patient as "teaching material" for his students. These responsibilities are not wholly antagonistic, for undoubtedly the student by his examinations and laboratory investigations not only furnishes valuable concrete contributions to the "work-up" of the case but by his questions and comments stimulates his teacher to a more critical and searching appraisal of clinical data. Thus, the presence of a student "on the case" is often an asset. However, this knowledge of disease which the student assists in acquiring and assembling is not always handled in such a way as to bring optimal benefit to the subject. The second responsibility of the clinical teacher, i.e., the use of the patient as teaching material, may quite obviously bring danger to the patient as well as influence harmfully the attitude of the physician-to-be. The authors have had the experience that some clinical teachers, with the best of intentions, are not dealing in the most desirable way with their patients when they are examining them in the presence of students. All manner of highly undesirable remarks and discussions are likely to occur if charts, specimens and roentgenograms are indiscriminately exhibited during bedside teaching. One has to realize that the patients, or at least many patients, are under emotional stress in this situation and only too apt to listen anxiously and to interpret wrongly what they hear. The authors think that it cannot be emphasized enough that the patient offers himself, in a sense, as a sacrifice when he lends himself to bedside teaching and that he is entitled to be dealt with in the gentlest and most considerate way. Whether or not he appears to be a sensitive person does not matter at all. Every patient ought to be treated as if he were sensitive, and every remark that might hurt a patient's sensitivity must needs be avoided if physicians want to carry on and further develop bedside teaching. It is the authors' opinion that the student must be made familiar with the considerate attitude toward a patient that is expected of him at a very early period of training. It is desirable to acquaint the student with this attitude before he goes into his clinical years.

DEPARTMENT OF SOCIETY ACTIVITY

L. FERNALD FOSTER, M.D., Secretary

COUNCIL CHAIRMAN'S COMMUNICATION

Postpayment Plan for the Borderline Group

FOR cases in the borderline group, the Public Relations Committee of your State Society encourages the principle of a postpayment plan, owned and controlled by the county medical society and managed by a full-time man in as many counties as needed, to permit all people in this borderline group to maintain their independence with respect to procuring medical care; the details of each postpayment plan are to be developed to fit into the peculiar needs of every county.

The Executive Committee of The Council, on July 29, 1936, approved the above recommendation of the Public Relations Committee and instructed this integrating unit to recommend the postpayment plan to all county medical societies at once, and to aid in the development of same wherever this assistance is desired.

The postpayment plan, as recommended, is to be used by the physician where the employed patient strikes an economic snag or some difficulty in obtaining necessary medical service. In all plans, the patient should first contact the physician who retains the privilege of making arrangements direct, or through the plan. Advice to the public in all localities should be: Go to your physician when ill, and if it is necessary in your case, you may procure the benefits of a postpayment plan.

The president and secretary of your county medical society received this month an outline of a postpayment plan which is being successfully conducted by a medical society in one of the Michigan counties. This, I hope, will stimulate thought and action toward the establishment of other postpayment plans for the borderline group by many county societies in this state. It is vital to Medicine that you develop an efficient postpayment system promptly.

P. R. URMSTON, M.D.

COUNCIL AND COMMITTEE MEETINGS

1. **July 8, 1936**—Public Relations Committee—Wayne County Medical Society Building, Detroit—6:00 P. M.
2. **August 12, 1936**—Joint meeting of Legislative Committee and Public Relations Committee—Olds Hotel, Lansing—3:00 P. M.
3. **August 14, 1936**—Special Committee to Study Schedules A and B—Wayne County Medical Society Building, Detroit—6:30 P. M.
4. **September 4, 1936**—Subcommittee on Relief Medicine with representatives of other professional groups—Statler Hotel, Detroit—8:00 P. M.
5. **September 4, 1936**—Exhibits Committee—Book-Cadillac Hotel, Detroit—5:30 P. M.
6. **September 6, 1936**—Maternal Health Committee—Olds Hotel, Lansing—10:00 A. M.
7. **September 9, 1936**—Legislative Committee of the Michigan State Medical Society plus Legislative Committee, Michigan Hospital Association—Michigan Union, Ann Arbor—2:00 P. M.
8. **September 10, 1936**—Special Committee to study Schedules A and B—Wayne County Medical Society Building, Detroit—6:30 P. M.
9. **September 13, 1936**—Maternal Health Committee—Olds Hotel, Lansing—10:00 A. M.
10. **September 16, 1936**—Contact Committee with State Health Department on Social Security Act—State Office Building, Lansing—10:00 A. M.
11. **September 17, 1936**—Contact Committee with Michigan Crippled Children Commission—Statler Hotel, Detroit—9:00 A. M.
12. **September 20, 1936**—Annual Meeting of The Council—Book-Cadillac Hotel, Detroit—4:00 P. M.
13. **September 20, 1936**—Subcommittee on Relief Medicine—Book-Cadillac Hotel, Detroit—2:00 P. M.
14. **September 20, 1936**—Committee on Medical Economics—Book-Cadillac Hotel, Detroit—8:00 P. M.
15. **September 23, 1936**—Preventive Medicine Committee—Detroit Athletic Club, Detroit—12:30 P. M.
16. **September 23, 1936**—Cancer Committee—Book-Cadillac Hotel, Detroit—6:00 P. M.

MINUTES OF MEETING OF PUBLIC RELATIONS COMMITTEE

July 8, 1936

1. *Roll Call*.—The meeting was called to order by Dr. L. Fernald Foster at 7:55 p. m. in the Wayne County Medical Society Building, Detroit. Those present were Dr. Foster, Bay City; Dr. F. B. Miner, Flint; Dr. F. T. Andrews, Kalamazoo; Dr. R. H. Holmes, Muskegon; and Dr. A. V. Wenger, Grand Rapids. Also present were Dr. Henry Cook, Flint, Chairman of The Council; Dr. P. R. Urmston, Bay City, Councilor; Secretary C. T. Ekelund, Pontiac; Dr. L. C. Harvie, Saginaw; and Drs. J. M. Robb, James H. Dempster, T. K. Gruber, H. A. Luce, L. O. Geib, F. B. Burke, F. H. Purcell, and R. H. Pino, all of Detroit; James A. Bechtel, Acting Executive Secretary of the W.C.M.S., and Executive Secretary Wm. J. Burns. Absent: Dr. E. I. Carr, Lansing; Dr. P. A. Riley, Jackson; Dr. J. J. Walch, Escanaba.

2. *Distribution of Medical Care for the Borderline Group*.—Dr. Foster presented the background leading to the call of this meeting for the purpose of discussing Distribution of Medical Care with particular reference to the borderline group. He spoke of the article in the *A.M.A. Bulletin* treating on this subject (May issue, entitled "The Planning and Organization of Medical Services"). Dr. Cook gave his views on this subject in a written statement; Dr. Robb advised always to have a plan in community service; he stated that industry and banking are just as confused about the future as is medicine. He recommended that medical organization place a statement in the newspaper every two weeks setting forth that the medical profession will meet the financial problem of the borderline patient, and also to inform the public what the medical profession is doing for it. Dr. Robb felt that Dr. Cook's statement should be placed before the public, as well as published in THE JOURNAL.

The subject was further discussed by Secretary C. T. Ekelund who stated that any so-called faulty distribution of medical care is a condition of poverty.

The matter was further elucidated by Drs. Urmston, Dempster, Gruber, Luce, Geib, Burke, Purcell, Harvie, Wenger, Holmes, Andrews, Miner and Pino.

(The problem of the indigent and his medical care had already been referred to the Subcommittee on Relief Medicine, part of the Economics Committee of the M.S.M.S., and was not discussed here.)

The consensus of opinion was that more information to the public and to the profession was necessary, through the Bureau of Information of the M.S.M.S., Speakers' Bureaus of county medical societies and through advertisements in newspapers.

Motion of Drs. Wenger-Andrews that for borderline cases, both adults and children, we encourage the principle of a postpayment plan, owned and controlled by the county medical society and managed by a full-time man in as many counties as possible, to permit all people in this borderline group to remain independent in the matter of procuring medical care; details of each postpayment plan to be developed to fit into the peculiar needs of every county. Motion carried unanimously. This motion was thereupon referred to the Executive Committee of The Council for approval, after which it is to be publicized to the profession and the public through the Bureau of Information. It was understood that a postpayment plan is to be used where the physician and patient have economic difficulty, and that the patient should first contact the physician.

Advice to the public: Go to your physician, and

if it is necessary in your case, you may procure the benefits of a postpayment plan from him.

3. *Adjournment*.—The meeting was adjourned at 10:50 p. m., with the Chair expressing thanks to all who had ventured to this meeting with the thermometer registering 105 degrees!

MINUTES OF MEETING OF LIAISON COMMITTEE WITH HOSPITAL ASSOCIATION

July 22, 1936

1. *Roll Call*.—The meeting was called to order by Dr. T. K. Gruber, Chairman, in the Olds Hotel, Lansing, at 7:15 p. m. Present were Dr. Gruber, Eloise; Dr. W. C. Ellet, Benton Harbor; Dr. H. S. Collisi, Grand Rapids; Dr. Henry Cook, Flint, Chairman of The Council; Secretary C. T. Ekelund, Pontiac; Dr. Wm. A. Hyland, Grand Rapids, Treasurer; Dr. Don Morrill, Grand Rapids, President of the M.H.A.; Dr. W. L. Babcock, Detroit, and Dr. John B. Jackson, Kalamazoo, Dr. S. W. Donaldson, Ann Arbor, and Dr. E. R. Witwer, Detroit, representing the Michigan Association of Roentgenologists; and Executive Secretary Wm. J. Burns. Absent: Dr. K. B. Brucker, Lansing; Dr. G. J. Curry, Flint.

2. *Group Hospitalization* was discussed by all present. Dr. Morrill stated that the M.H.A. intends to ask the Legislature for permissive legislation so that the individual counties may develop group hospitalization if desired. He stated the hospitals are encouraging a pay-as-you-go basis. Four hundred hospitals (out of 6,000) stopped operating in the United States during the depression. Dr. Collisi spoke of the study made by the Health Council of Grand Rapids, which brought out these points: All hospitals of the community must embrace the plan; the coöperation of the employer must be obtained; the medical fee must not be included; should it include care of the employe only, or also his family? Should it include nursing care other than regular institutional nursing, or dentistry, or prescriptions, etc.?

Dr. Babcock stated that group hospitalization is a child of the depression; that 46 different plans are being tried, not one like the other; that the Essex Plan (New Jersey) has resolved itself into an industrial plan; that it represents a small percentage of the hospital business—from 3% to 20% (the average being 12.5 per cent); that many local problems must first be solved before a plan can be put into operation; that he is not in favor of the plan for the city of Detroit at the present time as there is no need for it in that city; that the midwife of group hospitalization was the Report of the Committee on the Costs of Medical Care; that group hospitalization will not last—little will be heard of it in from 10 to 20 years.

Dr. Ellet felt that group hospitalization would hit the smaller hospitals very hard.

Motion of Drs. Collisi-Ellet that this Committee recommend to the Legislative Committee and to the Executive Committee of The Council, Michigan State Medical Society, that it offer the services of the Legislative Committee of the Michigan State Medical Society to collaborate with a corresponding committee of the Michigan Hospital Association in considering permissive legislation for a prepayment plan for hospital services, exclusive of medical care, and to report back to the corresponding organizations for the mutual approval or disapproval, before submission to the Legislature for possible enactment. This motion was thoroughly dis-

cussed and changed in several places because of the objections of Dr. Ellet. Finally it was put to a vote and carried unanimously.

3. *Radiologists' Care of Crippled-Afflicted Children.*—The radiologists spoke of their position in connection with afflicted-crippled child laws. Dr. Jackson asked the question: "Does the roentgenologist belong to the hospital or to the medical profession?" Placing the radiologist in Fee Schedule B had caused their depreciation, he stated. Full discussion ensued.

The Chair resolved the group into a Committee of the Whole.

Motion of Mrs. Morrill-Babcock that the fee for roentgenologists for the care of afflicted and crippled children be included in Schedule A, on the same basis as medical and surgical fees, for both ambulatory and hospital cases. Motion carried unanimously. Dr. Babcock will present this action to the Detroit Hospital Council for a concurrent motion.

4. *Emergency Service by Residents and Interns* was discussed by the Committee, but no action was taken.

5. *Anesthesia Administration.*—The question of anesthesia administration, as presented by "Hospital Management" was discussed by the Committee. It was felt that the following information should be sent to the editor of "Hospital Management": Most of the larger hospitals of Michigan are committed to the use of nurse anesthetists under the direction and training of a medical or surgical anesthetist, with the approval of the staff.

6. *Adjournment.*—The meeting was adjourned at 10:10 p. m. with the Chair expressing thanks to all for their attendance and advice.

MINUTES OF JOINT MEETING OF EXECUTIVE COMMITTEE OF THE COUNCIL AND THE LEGISLATIVE COMMITTEE July 29, 1936

1. *Roll Call.*—The meeting was called to order by Dr. Henry Cook, Chairman, in the Statler Hotel, Detroit, at 3:07 p. m. The following were present: Dr. Cook of Flint, Dr. A. S. Brunk and Dr. H. R. Carstens of Detroit, Dr. T. F. Heavenrich of Port Huron, and Dr. Frank E. Reeder of Flint. Also present: President Grover C. Penberthy, Detroit; Secretary C. T. Ekelund, Pontiac; and Treasurer Wm. A. Hyland, Grand Rapids. Councilor H. H. Cummings, Ann Arbor; (Chairman of the Legislative Committee); Councilor P. R. Urmston, Bay City; members of the Legislative Committee; Dr. F. B. Burke and Dr. L. J. Garipey of Detroit; Dr. L. G. Christian, Lansing; Dr. C. F. Snapp, Grand Rapids; (and Dr. Cook); Dr. L. Fernald Foster, Bay City; Dr. J. M. Robb, Detroit; Dr. T. K. Gruber, Eloise; President of the WCMS; and Executive Secretary Wm. J. Burns. Absent: Dr. C. E. Boys, Kalamazoo; Dr. H. E. Perry, Newberry.

2. *Minutes.*—The minutes of the Executive Committee of The Council, meeting of July 1, 1936, were read and approved; the minutes of the Legislative Committee, meeting of June 24, 1936, were read and approved.

3. *Tuberculosis Control Service.*—This subject was discussed and the recent action of the Preventive Medicine Committee and the PRC at their joint meeting of June 10 was reviewed. Motion of Drs. Carstens-Heavenrich that we communicate with the State Commissioner of Health to the effect that the proposed program on tuberculosis control service is assured of warm coöperation from the Michigan State Medical Society and we are waiting to hear from him relative to what further steps the Michi-

gan State Medical Society can take to aid him in this work. Carried unanimously.

Dr. Cook turned the Chair over to Dr. Cummings, Chairman of the Legislative Committee, at this point.

4. *Basic Science Bill.*—This proposed legislation was studied section by section.

Dr. Cook re-assumed the Chair at this point.

5. *Legislative Bulletins.*—This matter was referred to the Legislative Committee to do with same as it deems advisable, motion of Drs. Heavenrich-Carstens. Carried unanimously.

6. *Annual Report of Legislative Committee.*—The various items referred to the Legislative Committee by the 1935 House of Delegates were discussed:

(a) The integration of Medicine. The Committee is continuing its work on this matter.

(b) The unauthorized practice of medicine. Dr. Burke's report on this subject will be part of the Annual Report of the Legislative Committee.

(c) Revision of Medical Practice Act. Proposed amendments were presented, and on motion of Drs. Carstens-Reeder were referred to the Legislative Committee for study.

Recess for dinner—6:45 to 8:15 p. m.

(d) Michigan Health Council, or Allied Health Group. Reference was made to discussion of this subject before the 1935 House of Delegates (page 729 of November, 1935 JOURNAL). The integration program of the University of Michigan at Marquette, Michigan, on August 19, was also discussed. Motion of Drs. Heavenrich-Brunk that the President, the Chairman of The Council, and the Chairman of the Public Relations Committee attend this Marquette Conference, to represent the Michigan State Medical Society as a committee, and to discuss the matter of integration with Dr. J. D. Bruce, V. P. of the University of Michigan. Carried unanimously.

7. *Group Hospitalization.*—Dr. Gruber reported on meeting of the Liaison Committee with Michigan Hospital Association on July 22. The motion of the Liaison Committee "that this Committee recommend to the Legislative Committee and to the Executive Committee of The Council, Michigan State Medical Society, that it offer the services of the Legislative Committee of the Michigan State Medical Society to collaborate with a corresponding committee of the Michigan Hospital Association in considering permissive legislation for a prepayment plan for hospital services, exclusive of medical care, and to report back to the corresponding organization for the mutual approval or disapproval, before submission to the Legislature for possible enactment," was thoroughly discussed. Motion of Drs. Heavenrich-Cummings that the Legislative Committee of the Michigan State Medical Society be authorized to collaborate as per the recommendation of the Liaison Committee. Carried unanimously.

8. Monthly Membership Report.—

	1936	1935
Membership To July 20. (From 1/1 to 7/20, incl.)	3,481	3,407
(This includes Wayne County).....	1,283	1,288
Membership To July 20 (From 7/1 to 7/20, incl.).....	84	88
(This includes Wayne County).....	38	70

9. Advertising Sales.—

Sales for July, 1936.....\$671.42
The cost of printing JOURNAL for July, 1936.. 652.98

Bills payable for the month were presented in detail. Motion of Drs. Carstens-Brunk that the Re-

ports and bills payable, as presented, be approved and be ordered paid. Carried unanimously.

10. *Alleged unethical practice of two physicians.*—The report of the committee will be presented at the next meeting of the Executive Committee.

11. *Admission Policy at University of Michigan Hospital.* The report of the committee (Drs. Carstens and Penberthy) will be presented to the Executive Committee at a later date.

12 (a). *Advertising Annual Meeting.*—The committee (Drs. Brunk, Penberthy, Carstens) reported through its Chairman, Dr. Brunk, recommending that 4,000 copies of "Detroit Publicity" be obtained through the Detroit Convention and Tourist Bureau (The Committee had been given power to act by the Executive Committee on July 1, 1936).

(b) *Report on Annual Meeting Plans.*—Secretary Ekelund reported that 84 speakers would be on the program at the Detroit meeting, which would also include 52 scientific exhibits and 70 technical exhibits, and a Hobby Show with a special printed catalogue developed by the Woman's Auxiliary. The entire fourth and fifth floors of the Book-Cadillac would be used for this display.

The Official Program would be very descriptive and illustrative, containing some 36 pages. Motion of Drs. Heavenrich-Reeder that the Official Program be sent to each member of the Michigan State Medical Society before the Annual Meeting. Carried unanimously.

Dr. Ekelund suggested a Handbook for Delegates, similar to that prepared by the American Medical Association and certain state societies containing the Annual Reports, lists of Delegates, Officers, Committees, constitution and by-laws, and proposed changes in said constitution and By-laws and all other matter pertinent to the meeting of the House of Delegates. These reprints of the material (to appear in THE JOURNAL) could be sent to officers and delegates thirty days before the Annual Meeting, in compliance with the rules of the Michigan State Medical Society, and extra copies (about 250 in all) could be run off for interested members. This would be a saving over the plan of running all this copy in the Official Program. Motion of Drs. Carstens-Brunk that this plan of a Handbook for the Delegates be approved. Carried unanimously.

The item in the Official Program relative to a registration fee of \$5.00 to non-members whose names appear in the American Medical Directory and who desire to register at the Annual Meeting of the Michigan State Medical Society was approved.

13. *Postpayment plan for the borderline group.*—Report was given by Dr. Foster on meeting of PRC of July 8, 1936, at which the following motion was adopted: "For borderline cases, both adults and children, the PRC encourages the principle of a postpayment plan, owned and controlled by the county medical society and managed by a full-time man in as many counties as possible, to permit all people in this borderline group to pay their own way for medical care; details of each postpayment plan to be developed to fit into the peculiar needs of every county." Full discussion. Motion of Drs. Brunk-Reeder that this principle be approved. Carried unanimously.

14. *Fee Schedules A-B.*—Report was given on action of Augmented State Administrative Board on July 21, 1936, in reinstating the fee schedules for medical and surgical care of afflicted and crippled children. Dr. Cook spoke of the study and possible revision of fee schedules A & B, including the radiologists' fees. Motion of Drs. Carstens-Heavenrich that the chairman of The Council be authorized to appoint a committee for this purpose, and to take care of the radiologists' fees, if possible, and to re-

port back to the Executive Committee of The Council at its next meeting. Carried unanimously.

15. *Ohio State Annual Meeting.*—An invitation from the Ohio State Medical Association to attend its Annual Meeting in Cleveland next October was read to the Executive Committee.

16. *Secretaries Conference.*—The Chairman of the Secretaries, Dr. Foster, outlined the program of the Secretaries Conference of September 23, and requested approval of cost of dinners for the officers of the Michigan State Medical Society, the 53 secretaries of the county medical societies and the seven invited speakers, and also the cost of printing dinner tickets. Motion of Drs. Heavenrich-Brunk that the cost of the dinners and tickets as outlined be paid by the Michigan State Medical Society. Carried unanimously.

17. *Allegan County Medical Society.*—The signed application of all physicians of Allegan County, except four, for a charter as the "Allegan County Medical Society" was presented. Motion of Drs. Heavenrich-Carstens that a charter be granted the Allegan County Medical Society. Carried unanimously.

18. *President's Dinner.*—Dr. Penberthy presented his plans for the President's Dinner at the Annual Meeting of the Michigan State Medical Society, to honor the Past-presidents of the Society. Members of the Executive Committee felt that this dinner should not be the responsibility of the President, but that the State Society should assume the expenses thereof. This is done by other state medical societies. Motion of Drs. Brunk-Carstens that the Michigan State Medical Society pay the expenses of the President's Dinner at which the Past-presidents of the Society are honored. Carried unanimously.

19. *Resignation of Councilor Hafford.*—The resignation of Councilor George C. Hafford of the Third District, due to ill health, to take effect after the Annual Meeting, was read.

20. *Appropriation for Goitre Committee.*—Request of Dr. D. M. Cowie for appropriation to continue tabulation of findings of Iodized Salt Committee was presented. Motion of Drs. Heavenrich-Reeder that this request be laid on the table, pending estimation of amount necessary. Carried unanimously.

21. (a) *Michigan State Medical Society Representatives to Joint Committee.*—The matter of paying the travel expenses for Michigan State Medical Society representatives to the Joint Committee on Public Health Education was discussed. Motion of Drs. Heavenrich-Carstens that the expenses of all Michigan State Medical Society representatives to the Joint Committee be allowed. Carried unanimously.

(b) *Expenses of PRC Meeting of July 8.* The expenses of members of the PRC in attending meeting of July 8, 1936, were allowed, on motion of Drs. Brunk-Carstens, and carried unanimously.

(c) *Request of Maternal Health Committee.* The request for special envelopes, with the address of the Chairman in Grand Rapids thereon instead of the address of the executive office of the Michigan State Medical Society in Lansing, was presented to the Executive Committee and discussed. Inasmuch as this Committee is conducting a survey in the state and these envelopes will be used mainly to return tabulations to the Committee Chairman from the various county medical societies, the Executive Committee approved the request, on motion of Drs. Heavenrich-Reeder, and carried unanimously.

22. *Miscellaneous matters.*—

(a) The matter of offering help to county medical societies which desire speakers at their meetings

was approved. Assistance will be given through the PRC.

(b) Correspondence from John A. McNamara, director of the Cleveland Group Hospital Association, was presented and discussed. Motion of Drs. Heavrich-Reeder that this matter be left to President Penberthy to answer in any manner he sees fit. Carried unanimously.

(c) The Executive Secretary was instructed to request all county medical societies, which have not reported to date, to send dates of their regular and annual meetings to the Michigan State Medical Society Executive Office.

23. *Adjournment*.—The meeting was adjourned at 11:40 p. m. after the Chair had thanked all for their attendance and advice.

MINUTES OF JOINT MEETING OF PUBLIC RELATIONS COMMITTEE AND LEGISLATIVE COMMITTEE August 12, 1936

1. *Roll Call*.—The meeting was called to order by Dr. H. H. Cummings, Chairman of the Legislative Committee, at 3:15 p. m., Olds Hotel, Lansing. Those present were Drs. Cummings, Ann Arbor; L. Fernald Foster, Bay City, Chairman of Public Relations Committee; F. T. Andrews, Kalamazoo; F. B. Miner, Flint; Roy H. Holmes, Muskegon; E. I. Carr, Lansing; L. G. Christian, Lansing; Henry Cook, Flint; L. J. Gariepy, Detroit; F. B. Burke, Detroit; Philip A. Riley, Jackson; C. F. Snapp, Grand Rapids; and A. V. Wenger, Grand Rapids. Also present were Secretary C. T. Ekelund, Pontiac; Dr. S. F. Horowitz, Bay City; Dr. Dean W. Hart, St. Johns; Dr. A. G. Sheets, Eaton Rapids; Mr. H. T. Corson, Chicago, of the Wheat Flour Institute; Mr. M. G. Schancupp, Assistant Attorney General, Lansing; and Executive Secretary Wm. J. Burns. Absent, Legislative Committee: Dr. H. E. Perry; Public Relations Committee: Dr. J. J. Walch.

2. *Minutes*.—The minutes of the joint meeting of the Legislative Committee with the Executive Committee of The Council July 29; the minutes of the Public Relations Committee, meeting of July 8, were dispensed with.

3. *Basic Science Bill*.—The committee gave further study to the proposed basic science bill.

4. *Wheat Flour Institute*.—Mr. H. T. Corson of the Wheat Flour Institute appeared before the Committee at the suggestion of Dr. Andrews. The Michigan State Medical Society in 1930 adopted a resolution relative to the use of bread, and the Kalamazoo Academy of Medicine desired advice as to whether a similar resolution should be adopted by it. This matter was thoroughly discussed, and referred to the Executive Committee of The Council.

5. *Bureau of Information*.—The Executive Secretary read three sample releases proposed for dissemination through the 425 newspapers of the state through the Bureau of Information. Motion of Drs. Gariepy-Snapp that releases on legislative matters be given to the press of Michigan at weekly intervals, to begin immediately. Carried unanimously.

Motion of Drs. Burke-Gariepy that a committee composed of the Chairman of the Public Relations Committee plus the Chairman of the Legislative Committee, and the Secretary of the Society be appointed to advise the Executive Secretary on all releases. Carried unanimously. The matter of ascertaining the value of the releases from the Bureau of Information was discussed, and it was felt that the best measure would be to subscribe to a clipping

bureau. Motion of Drs. Gariepy-Cook that this committee subscribe to a clipping bureau service not to exceed \$50. Carried unanimously.

The cost of the postage to mail the weekly releases to the 425 newspapers was approved.

6. *Legislative Bulletins*.—The matter of sending periodic legislative bulletins to the county medical societies was discussed. The Executive Secretary read a sample release. Motion of Drs. Christian-Burke that this first legislative bulletin be referred to the Public Relations Committee with power to edit and release. Carried unanimously.

In the future the Legislative Committee will furnish material for these legislative bulletins and refer same to the PRC for correction and dissemination. The copy will be developed to fit circumstances of the time of release.

7. *Study of Group Hospitalization*.—The motion of the Executive Committee of The Council, meeting of July 29, (Item 8) was read. The background was presented by Dr. Cook. It was felt that a joint meeting of the Michigan State Medical Society Legislative Committee with the Legislative Committee of the Michigan Hospital Association was indicated, and the Executive Secretary was requested to arrange same.

8. *Legislative Exhibit*.—Chairman Gariepy will call a meeting of his committee within the next week to complete arrangements for this exhibit.

9. *Inquiry from a Legislator*.—The inquiry of a legislator who had been very friendly to public health legislation as to how he could secure the support of the physicians in his district, as he was facing keen competition, was presented and discussed. Motion of Drs. Christian-Snapp that this Legislative Committee suggest to the officers of the particular county medical society in question that, if in their opinion this legislator will be a good representative for their district, that the Michigan State Medical Society would like to support him. Carried unanimously.

Recess for dinner, 6:30 to 7:30 p. m.

Dr. Foster, Chairman of the PRC, assumed the Chair at this point.

10. *PRC Letter No. 4*.—The various items for this release were suggested by Dr. Foster and the Executive Secretary. Dr. Tuck's letter relative to the proposed recodification of Michigan's laws to fit into the Social Security scheme was read. It was recommended that in PRC Letter No. 4 the statement should be made that the county medical society should be the mentor of everything medical in its district, that the society should know all about the Social Security Act and its implications and have something to say in the direction of policies developed under it. The other items proposed for PRC Letter No. 4 were approved.

Dr. Cook recommended that a description of the WCMS Plan (Pino Plan), as mimeographed by him, be sent with PRC Letter No. 4 to every county medical society to stimulate thought and action toward the establishment of postpayment plans. This was ordered done, on motion of Drs. Holmes-Carr, and that the enclosure be mentioned in PRC Letter No. 4, as such a plan is necessary for the borderline group.

11. *Medical Supplement in Newspapers*.—This was discussed, and on motion of Drs. Carr-Wenger was approved with the recommendation to county medical societies that it be put into operation throughout the state. Carried unanimously. The Executive Secretary was instructed to procure copies from Wichita, Kansas, and send a sample to each county medical society.

12. *Date of Releasing Brochure*.—Motion of Drs. Miner-Andrews that the Booklet "Who Wants So-

cialized or State Medicine!" be released at once. Carried unanimously.

13. *Fee Schedules A and B.*—Report was given that these schedules are to be studied and necessary revisions recommended by a special committee of The Council, Michigan State Medical Society.

14. *Legislative Bulletins.*—From the Legislative Committee came the proposed Legislative Bulletin No. 1. (See item 6 of these minutes.) Motion of Drs. Holmes-Andrews that Legislative Bulletin No. 1 be approved as presented and be sent out. Carried unanimously.

15. *Resolutions on Death of Dr. Duncan A. Cameron.*—Dr. Christian spoke of the recent death of Dr. Cameron and his fine work in the Legislature of 1933. This Committee recommended that the Executive Committee of The Council draw up resolutions to the memory of Dr. Cameron.

16. *Adjournment.*—The Chairmen expressed their appreciation to the officers, members and guests for their attendance at this long session on a very hot day, and for their excellent advice, and adjourned the meeting at 9:07 p. m.

Six Against Four

"Another pamphlet!"—"More material for the waste basket!"—"Just another circular!"—Let us hope that these phrases will not be used when the physician receives the new concise and striking booklet recently issued by Public Relations Committee of the Michigan State Medical Society. 'Tis well said that a "prophet is without honor in his own country" but the writer feels sure that in this case each physician will make this booklet a temporary bible and even revert back to his student days and memorize it; as he memorized the names of the nerves of the brain. 'Tis true that many of these arguments are well known to the average physician and without doubt the undermining motives of those self seekers who have sought to foster socialized medicine in some form or guise on the unsuspecting public, have been apparent to the family physician. On the other hand, while these ideas are present they are more or less in the nebulous form. But this booklet presents concise reason and answer to so called socialized medicine.

It is rather strange to note that source of the propaganda of socialized medicine is not most dangerous from those who boldly advocate this disastrous change. It requires no stretch of imagination or Sherlock Holmes to uncover "The Ethiopian in a woodpile" when this is advanced by the paid social worker. Naturally they want to hold their job, increase their importance and finally to reach that goal which is probably incident to the whole human race, that is to live without working or at least to live off our fellowman's work. These individuals are of small moment.

But what we have to fear is the individual who under the cloak and guise of helping the co-called busy practitioner finally helps her or himself to the choicest food of the table and leaves the crumbs of socialized medicine. To re-echo an article in the STATE MEDICAL JOURNAL, beware of the "Wooden Horse."

"SIX AGAINST FOUR" is a booklet to carry in your coat pocket along with your prescription pad, charge book and your pocketbook. And of these "Four Horsemen" this prophet may prove the most valuable.—From *Mercy Staff Bulletin* of September, 1936 (Mercy Hospital, Bay City, Mich.).

COUNTY SOCIETIES

EATON COUNTY

The Eaton County Medical Society held its regular September meeting at the Carnes Tavern, Charlotte, on the evening of Thursday, September 17, 1936. Following dinner, the meeting was at once turned over to Dr. Frank Stiles, Lansing dermatologist, who addressed the society in an informal manner on the subject "Common Contagious Skin Diseases." Very thoroughly, Dr. Stiles discussed scabies, the various forms of impetigo and the group of ringworm diseases. Strangely enough, the listening physicians were free to admit that they did not know quite as much about these rather hackneyed subjects as they had surmised. Dr. Stiles traced the life cycle of the *acarus* or *sarcoptes scabiei* in a very interesting fashion and discussed its diagnosis and treatment. He impressed upon his audience that the disease respects no social differences and that the diagnosis is often to neglect the possibility of scabies in patients in the upper social strata.

Following this talk, a business meeting was held during which and after the full deliberations of the society, it was decided that the delegate from this society to the House of Delegates of the Michigan State Medical Society, be instructed to carry to the House the message that the Eaton County Medical Society believes that the term of office of a councillor should be three years instead of five and that there should be no limitations as to the number of terms which he may serve. Dr. J. W. Davis, Medical Director of the Eaton County Health Unit of the W. K. Kellogg Foundation, and Dr. G. M. Byington, of the W. K. Kellogg Foundation, Battle Creek, spoke briefly about the work of the foundation for the coming year.

THOMAS WILENSKY, *Secretary*

HOUGHTON-KEWEENAW-BARAGA COUNTIES

Regular monthly meetings of the Houghton County Medical Society were resumed Tuesday, September 1, at the Douglas House, Houghton, with fifteen members present. The business session was taken up by report of the Public Relations Committee—Dr. H. M. Joy making the report. The Medical Society went on record that they were willing and anxious to cooperate with the Probate Judge in the filter system for afflicted children. Drs. Stewart, Kirton and Coffin were appointed as the Medical Filter Committee for this work. Drs. Levine and LaBine are the Filter Committee for adults.

A committee for drawing up new by-laws and constitution for the County Medical Society, consisting of chairman Dr. Waldie, Levine, Joy, Leo and King, was appointed. Dr. G. C. Stewart of Hancock read a paper on "The Injection or Ambulant Treatment of Hernia." Three cured cases were presented for examination and questions by members of the society. Slides were shown showing histological changes in muscle structure and the action of solutions in producing proliferation and growth of new connective tissue. These slides were the property of Dr. A. F. Bratrud of the University of Minnesota and he kindly lent them to Dr. Stewart. Dinner was served previous to the medical meeting.

G. C. STEWART, M.D.

JOUR. M.S.M.S.

WOMAN'S AUXILIARY

MRS. A. V. WENGER, *President*, 132 Grand Avenue, N.E., Grand Rapids.

MRS. CARL F. SNAPP, *Secretary-Treasurer*, 980 Plymouth Road, S.E., Grand Rapids.

MRS. FRANK W. HARTMAN, *Press Chairman*, 7440 La Salle Blvd., Detroit.

Woman's Auxiliary, Michigan State Medical Society

The Tenth Annual Session of the Woman's Auxiliary to the Michigan State Medical Society was officially opened Tuesday, September 22, at 8:30 a. m., in the Book-Cadillac Hotel, with a board meeting—breakfast. Mrs. A. M. Giddings of Battle Creek, president, was in the chair.

The reports of the County Units, which have been eagerly anticipated, were received with unusual interest.

Outstanding accomplishments briefly mentioned are as follows:

The *Hygeia* subscriptions goal was 598; the achievement was the placing of 1,862 subscriptions in schools.

It was disclosed that a large percentage of our members all over the State are active in lay organizations. Several are serving as department chairmen in the Michigan State Federation of Women's Clubs, two as vice chairmen of the Social Welfare Department, one of them that of public health, another the president of a district Nursing Association.

Wayne County, referred to as the "big sister" of the organization, has been especially active in its public relations department, providing several public lectures by prominent medical men on topics of interest and importance, study groups on the history of Medicine and the men who have pioneered in this field; the Arts and Crafts Exhibit, which interested about one hundred exhibitors, a decided increase in membership; in Wayne County, 334 *Hygeia* subscriptions were placed in schools and a similar number in schools in Kalamazoo County. Calhoun County provided maternity kits for indigent mothers, also contributed five hundred dollars to the fund in a drive sponsored by local physicians to raise the mortgage on the shell of a new general hospital so that completion of the building could go on under federal aid.

Much work of benevolent and educational nature has been done to aid hospitals, homes for the aged, and underprivileged children.

The election of officers came next with the following results:

President—Mrs. A. V. Wenger, Grand Rapids.

President-elect—Mrs. G. C. Hicks, Jackson.

First Vice President—Mrs. Claire I. Straith, Detroit.

Secretary-Treasurer—Mrs. Carl F. Snapp, Grand Rapids.

Mrs. A. M. Giddings, retiring president, will remain a member of the Board of Directors.

STANDING COMMITTEE CHAIRMEN

Program—Mrs. F. T. Andrews, Kalamazoo.

Public Relations—Mrs. F. L. Foster, Bay City.

Press—Mrs. Frank W. Hartman, Detroit.

Organization—Mrs. Claire L. Straith, Detroit.

Legislation—Mrs. L. G. Christian, Lansing.

Revision—Mrs. Jas. H. Dempsey, Detroit.

Hygeia—Mrs. Arthur K. Woodburn, Grand Rapids.

Historian—Mrs. J. Earl McIntyre, Lansing.

Parliamentarian—Mrs. Elmer L. Whitney, Detroit.

A delightful luncheon was served in the Founder's Room following the election of officers. Mrs. Robert E. Fitzgerald, Wauwatosa, Wisconsin, president of the National Auxiliary, was the honored guest and speaker.

Mrs. Fitzgerald offered continued coöperation from the wives of physicians in projects calculated to develop national health programs and educational campaigns along lines of health preservation and medical enlightenment.

Mrs. Guy L. Kiefer of Lansing, organizer and honorary member of Wayne County Auxiliary, spoke briefly.

Greetings and recommendations were expressed by Dr. Grover C. Penberthy, retiring president of the Michigan State Medical Society, and his successor, Dr. H. E. Perry of Newberry. Dr. J. Milton Robb, chairman of the Auxiliary Advisory Committee, and Dr. F. T. Andrews of Kalamazoo, member of the committee.

The Dinner-Bridge at the Woman's City Club in the evening was a delightful affair. Merriment and interest registered high during the drawing for door prizes presented with the compliments of many local firms.

At 9:30 a. m., Wednesday, busses were boarded at the Book-Cadillac for Mr. Henry Ford's Greenfield Village, where bits of interest from all over the United States are displayed. The trek through this quaint, quiet village in horse-drawn vehicles is indeed a sharp contrast to the ride in swiftly moving motor cars on Michigan Avenue, which leads one very close to the entrance. After riding, walking and looking for many miles—and it was a hot day—the charm and coolness of Dearborn Inn was as refreshing to the visitors as an oasis in a desert would have been.

The Hobby Exhibit, the first of its kind to be undertaken by the Auxiliary, attracted the attention of all the visitors. Mrs. Milton D. Vokes, chairman, and her energetic committee are to be congratulated on the results of their enthusiastic efforts.

The wide variety of artistic talents displayed in original work and collections as hobbies, was fascinating.

As a fitting climax to the round of activities, the officers for 1935-1936 and 1936-1937 were honored by Mrs. Roger V. Walker, president of Wayne County Auxiliary, at a dinner party in her delightful home on Parker Avenue.

Hospitality reigns supreme in this home at all times, but on this occasion the three Walker youngsters, Frank, Frances, and Roger, Jr., who were granted a leeway on bedtime, supplemented this fact by assisting their mother in discharging her duties as hostess.

The members of Wayne County Auxiliary have happily served as hostesses to this superior group of women and a standing invitation is extended to them to attend their meetings when they have the opportunities.

* * *

Mrs. Hugo A. Freund served as Chairman of Registration for each Detroit Medical Convention during the past year and had been appointed to serve in that capacity during the State Meeting. The untimely death of this beloved and valued member is keenly felt by the Auxiliary. An appropriate obituary is being prepared.

(Mrs. Frank W.) BLANCHE B. HARTMAN,
State Press Chairman.

Father—You are going to marry that insignificant little fellow! Why, you used to say you would never marry a man less than six feet high.

Daughter—Oh, I know. But I decided to take off 20 per cent for cash.

MICHIGAN'S DEPARTMENT OF HEALTH

C. C. SLEMONS, M.D., Dr.P.H., Commissioner
LANSING, MICHIGAN

Communicable Disease Incidence

Although scarlet fever has been lower during the greater part of the last two years than for three or four years previous to that time, the incidence has again increased relatively during the past summer. In accordance with the season, the incidence is low but at the same time somewhat higher than for the two preceding summers. It is possible that this may be a forerunner of a somewhat increased incidence during the coming fall and winter months. Communities which have been relatively free from scarlet fever for several years should be on the lookout for a recurrence of the disease.

The poliomyelitis season is waning and indications are that there will be an exceptionally low number of cases this year. The only unusual occurrence in the United States so far coming to notice has been in Alabama and, to some slight degree, in adjoining states.

During the month of August there occurred two cases of smallpox in Allegan County. The first case had traveled extensively within and without the state during the incubation period. The other case was a second member of the family and was secondary to the first. These are the only cases that have occurred in the state for some months with the exception of a few in Detroit. The Detroit cases have been mild for the most part and somewhat atypical.

Meningitis continues to show a slightly higher than normal endemic incidence. However, there has been no material increase in incidence and there is no reason to expect any great number of cases or outbreaks in the near future.

Physicians Awarded Scholarships

Ten Michigan physicians have been granted scholarships for postgraduate training in public health at the University of Michigan and Johns Hopkins University, according to Dr. C. G. Slemons, health commissioner. The scholarships are made available by the Michigan Department of Health under the provisions of the Social Security Act providing for the adequate training of public health personnel.

The Johns Hopkins scholars include Dr. J. W. Davis, Eaton County health officer; Dr. E. V. Thiehoff, health officer in District No. 7, including Clare, Gladwin and Arenac counties; Dr. Russell Pleume, epidemiologist, State Department of Health; and Dr. Joseph Molner of Detroit. A leave of absence from their present duties has been granted the recipients for a year of postgraduate study in public health administration.

The six physicians who will attend the special intensive public health training course at the University of Michigan, beginning September 28, under the auspices of the State Department of Health, include Dr. Edwin H. Place, Blissfield; Dr. Clifton E. Merritt, Coldwater; Dr. Clifford C. Corkill, Fennville; Dr. Leo T. Moleski, Grand Rapids; Dr. Roelof Lanting, Ann Arbor; and Dr. Ervin J. Brenner, East Jordan.

County Health Officers

The organization of seven new county health departments, this year, has brought the total number of counties provided with a full time public health service to 50. Five of these new departments have now been provided with health officers.

Dr. M. C. Igloe has been appointed health officer of the Mecosta-Osceola district and Dr. L. W. Switzer is directing the activities of the Mason-Manistee district. Dr. L. A. Berg is directing the new Menominee county health department. Dr. R. C. Farrier took over the direction of the Delta county health department, September 1.

Dr. David Littlejohn, formerly health officer of Midland county, has been appointed health officer of Chippewa County. As yet no appointments have been made in the newly organized departments in Iron County or the Houghton-Keweenaw districts.

Maternal and Child Health Program

As a result of a broad program to improve maternal and child health services, Dr. Lillian R. Smith, director of the Bureau of Child Hygiene and Public Health Nursing, reports approximately every county in Michigan is now served by public health nurses sponsored either by the county units or the State Department of Health. A total of 29 field nurses are now carrying on educational nursing activities among mothers and children in thirty-two Michigan counties. The remainder of the counties, with but one exception, are served by local public health nurses.

Personnel changes in the bureau to meet the demands of the new program include the addition of Miss Mabel Munro as consultant in maternal and child health nursing in charge of staff nurses. Miss Munro was formerly director of the St. Joseph, Missouri, Visiting Nurses Association.

Two associate physicians who will assist Dr. Smith in both office and field work include Dr. Sue Hurst Thompson and Dr. Vida H. Gordan. Dr. Thompson comes to the Michigan department from Gary, Indiana, where she served as school physician. Dr. Gordan served during the past year as assistant resident in pediatrics at the University Hospital at Ann Arbor and comes to the department with a background of public health training and experience.

Dr. Pearl A. Toivonen is continuing her work as field physician, and Miss Annette M. Fox is serving as district nursing director for the Upper Peninsula with Miss Esther Nash, district director for the Lower Peninsula.

Bureau of Industrial Hygiene Created

A Bureau of Industrial Hygiene has been created in the Michigan Department of Health, with John M. Hepler, C.E., as director. The new bureau will concern itself with the investigation of occupational hazards in Michigan's many industrial plants, preventing common occupational diseases, combating industrial poisons, and improving environmental health factors in the hazardous occupations.

The highly industrialized nature of Michigan makes the work of such a bureau a significant phase of the whole public health program. Census figures indicate that 44.6 per cent of Michigan's workers are employed in the manufacturing, mercantile and mineral extraction industries compared to an average percentage of 30.9 for the United States. There are 860,164 workers in the potentially hazardous industries of the state. The United States Public Health Service estimates that 342,253

OBITUARY

of these are engaged in occupations which may cause or have been known to be associated with specific occupational diseases. It is with this group that the activities of the new bureau will be concerned.

A preliminary survey of plant conditions to determine the scope of existing industrial hazards, the location of potential hazards, and to evaluate the need for preventive measures is being undertaken by the bureau. An important phase of the program will be the collection and analysis of case records of occupational diseases. Act 119, Public Acts of 1911, makes the reporting of occupational diseases mandatory upon every physician treating such a case. To insure the success of this work, the coöperation of all physicians in the reporting of occupational diseases will be needed.

OBITUARY

Dr. Duncan A. Cameron

DR. DUNCAN A. Cameron, dean of Northern Michigan Physicians, died at his home in Alpena on August 3, 1936, the cause of his death being angina pectoris. Dr. Cameron located in Alpena over half a century ago. He had been in failing health for the past few years, which compelled him to give up much of his large active practice, though he still continued to care for as many as his failing health would permit. Dr. Cameron was widely known and was the beloved physician among all who knew him.

Dr. Cameron graduated from the McGill University in 1884. He was born on May 7, 1863, on a farm near Strathroy, Ontario. He was the son of the late John Cameron, native of Scotland, who came to Canada in 1847. After his internship at one of the largest of Montreal's hospitals, Dr. Cameron came to Alpena. In 1885 he took post graduate work in New York and he studied in Chicago. In 1900-1901 Dr. Cameron went abroad for a year of postgraduate work at Edinburgh. Dr. Cameron, as is seen, was well trained, and was both surgeon and physician of unusual ability. He was a member of the Alpena County, Michigan State, and American Medical Associations. He always took an active interest in medical affairs, being at one time vice-president of the Michigan State Medical Society. He was, in 1933, Democratic member of the Michigan House of Representatives for the Alpena-Alcona district. During his term of office, he served on four committees, namely the Apportionment, Public Health, Kalamazoo State Hospital, and Ypsilanti State Hospital.

Dr. Cameron is survived by his wife, Edith Young Cameron, and one daughter, Mrs. W. B. Howell of Montreal.

Dr. Duncan A. Cameron, "Rory" of the great heart, passed to his reward Tuesday morning, August 4, after fifty-one years of unexampled service to the people of the community which he loved with all the warmth of his rich soul—what a fluttering of the angels' wings there must have been as they came to welcome that soul.

Dr. Cameron needs no eulogy here, nor on any other printed page. His epitaph is graven immutably on the hearts of thousands of people to whom he was physician and friend during the glorious half century and more that he gave to humanity—women

with whom he went into the valley of the shadow, men snatched back from the grave by his often heroic treatment, children by whose side he kept long-night vigil.

Selfless, generous to a fault, tender as a woman, lion-hearted on occasion, there was only one Doc Cameron. We shall not see his like again.—*The Alpena News*.

Dr. Ira Dean Loree

DR. IRA Dean Loree of Ann Arbor, died at his home on August 10, 1936, of a heart attack.

Dr. Loree was born sixty-seven years ago. He joined the faculty of the University of Michigan in 1902 in the Department of Surgery. He held the position of professor from 1908 to 1920, when he resigned from the University to devote full time to the work of St. Joseph's Hospital. He was born in Ridgeway, Michigan, and had lived in Ann Arbor since 1898, where he entered the University Medical School after preliminary education at the Michigan State Normal College. He was a member of the Washtenaw County, Michigan State, and the American Medical Associations. He is survived by his widow, and one son, Douglas, of Ann Arbor.

Dr. Lois Torres

DR. LOIS Torres was a graduate from the school of music of Milton College, Milton, Wisconsin. She was also a graduate nurse from the Battle Creek, Michigan, sanitarium. After several years spent in the nursing profession, she completed a medical course in the University of Michigan at Ann Arbor. She then accepted a position as school physician at the State Normal School of Mt. Pleasant, Michigan. She was affiliated with this school for five years, but failing health necessitated a leave of absence from work on February last. After several months of ill health, she passed away in the home of her sister at St. Andrews, Florida. Dr. Lois Torres was born on January 7, 1890, at Farina, Illinois. She was the youngest of ten children born to Mr. and Mrs. E. M. Whitford. Three brothers and three sisters survive.

CORRESPONDENCE

To the Editor of the
JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY:

Sixty-odd years ago a Homeopathic medical school was started in Lansing but was discontinued soon after it became evident that no subsidy might be expected from the State treasury. An effort is now under way to collect data that will permit the writing of a complete and accurate history of this institution, fully documented and carefully compiled.

Any help along this line would be gratefully received, especially printed matter, manuscripts, letters or other contemporary records. A diploma would be especially valuable and if received would be promptly photographed and returned.

H. S. BARTHOLOMEW.

Lansing, Michigan, September 9, 1936
1115 Capital National Building

GENERAL NEWS AND ANNOUNCEMENTS

Mrs. Hugo A. Freund, wife of Dr. Hugo A. Freund of Detroit, died September 12 after a week's illness of pneumonia.

* * *

Dates to Remember:

November 3, 1936—General November Election.
January, 1937—Legislature convenes in Regular Session in Lansing.

* * *

Past-President Louis J. Hirschman of Detroit and the former Mrs. Hannah C. Kellogg of Battle Creek were married in Detroit on August 15. Felicitations!

* * *

The Bulletin of the Muskegon County Medical Society states: "The future of the practice of medicine depends upon organized medicine. The success of organized medicine depends upon your support."

* * *

The Upper Peninsula Medical Society held a most successful meeting—its 39th—at Ishpeming on August 20-21, 1936. A complete story and registration data will be published in the November JOURNAL.

* * *

The History of Medicine in Michigan is obtainable in two volumes, price five dollars. Order through the Michigan State Medical Society, 2020 Olds Tower, Lansing. A fine Christmas present for any physician!

* * *

The brochure of the Michigan State Medical Society "Who Wants Socialized or State Medicine?" was sent to every member of the State Society the latter part of August. Additional copies upon request. Write 2020 Olds Tower, Lansing.

* * *

The Houghton-Keweenaw-Baraga Medical Society inaugurated its 1936-37 season on October 6 with a meeting at the Miscowaubeh Club, Calumet. All meetings are held on the first Tuesday of each month. The Annual Meeting will be held in Houghton on Tuesday, January 5, 1937.

* * *

Crippled Child Commitments: August, 1936—180 cases, of which 82 went to University Hospital. One hundred of these 180 were new cases. Included in the above total were 41 cases from Wayne County, of which 6 were committed to the University Hospital.

* * *

Hundreds of social and welfare workers, hospital assistants, board members, civic leaders, and influential citizens visited the Exhibit of the Michigan State Medical Society in the Book-Cadillac Hotel on Tuesday, September 22 when the public was invited to inspect the 122 scientific and technical displays.

* * *

State Society Night will be celebrated by the Ingham County Medical Society on Tuesday evening, November 10, 1936. The newly elected officers of the Michigan State Medical Society will be honored. Dr. John H. J. Upham, Columbus, Ohio, President-Elect of the A. M. A., will be guest speaker.

* * *

Eighty-six medical golfers enjoyed invitational golf at the Detroit Golf Club on Tuesday, Septem-

ber 22, on the occasion of the Annual Meeting of the Michigan State Medical Society. A complete story on this party, the prize winners, and the individual scores will be published in the November JOURNAL.

* * *

The following officers were elected for the year 1936-37 by the Section of Dermatology and Syphilology at the Michigan State Medical Society meeting held in Detroit, September 23 and 24, 1936; Chairman, Dr. G. Warren Hyde, Detroit Polyclinic; and Secretary, Dr. Ruth Herrick, 628 Medical Arts Bldg., Grand Rapids.

* * *

The Detroit Medical News of September 14 was designated as the "Woman's Auxiliary Number." This issue was devoted to a résumé of the good work done by the Woman's Auxiliary to the Wayne County Medical Society during the past year. The publication was finely illustrated and the editorial content was excellent.

* * *

The Maternal and Child Health Program under the Social Security Act is being inaugurated and developed by the State Department of Health, in co-operation with the individual county medical societies, in the following counties: Cass, Clinton, Gratiot, Ionia, Lapeer, Livingston, Macomb, Muskegon, St. Joseph and Tuscola.

* * *

The eighth annual convention of the Central Association of Obstetricians and Gynecologists met October 15, 16, and 17 at the Statler Hotel, Detroit. The scientific sessions were held afternoons with the Detroit Obstetrical and Gynecological Society furnishing an evening program October 15. Dr. Emil Novak was guest speaker at the convention.

* * *

A high-light of the Past Presidents' Dinner of September 23, 1936, held on the occasion of the Annual Meeting of the Michigan State Medicine Society, was the presentation of Past Presidents' keys to the living former chief executives (fourteen) of the Michigan State Medical Society.

* * *

The Hobby Exhibit at the Annual Meeting was a unique presentation. Physicians with hobbies showed their avocational work, and it was an exhibit to be proud of. The show was arranged through the courtesy of the Woman's Auxiliary, and much credit is due the ladies for the unusual success of this innovation at the Annual Meeting of 1936.

* * *

Dr. C. C. Walker of Detroit died September the 28th while leaving his home for his office. Dr. Walker graduated from the Medical Department of the University of Michigan, 1904. After graduation, he located in Siam where he was chief of an eye hospital until 1919 when he located in Detroit, confining his work to diseases of the eye. He is survived by his wife, two sons and one daughter.

* * *

The University of Michigan Pediatric and Infectious Disease Society will hold its annual meeting at the University on October 30 and 31. A business session will precede the regular program, which consists of twenty-four different papers by prominent pediatricians at the University and throughout the state. Owing to the fact that this program has reached us as we go to press, it is impossible to present the different items in detail.

County medical societies desiring assistance in obtaining speakers for their meetings are invited to send their requests to the Michigan State Medical Society which will endeavor to obtain men of outstanding talent to appear before the members of the county medical society. Be sure to indicate the exact date, time and place of the meetings, subjects according to first choice, second choice and third choice, and the possible attendance.

* * *

"Who Wants Socialized or State Medicine"? is in its second edition (first printing, August, 1936; second printing, September, 1936), and judging from the avalanche of requests for copies of this booklet prepared by the Public Relations Committee of the Michigan State Medical Society, the third edition is not far off. The Iowa State Medical Society, for example, inquired concerning the possibility of sending a copy of the brochure to each one of its twenty-five hundred (2,500) members!

* * *

Dr. L. Fernald Foster, Secretary of the Michigan State Medical Society, has been invited by Dr. Olin West, Secretary of the A. M. A., to present a paper on the Michigan Filter System at the Annual Conference of Secretaries of Constituent State Medical Associations to be held in Chicago, Monday and Tuesday, November 16 and 17.

Dr. West invites all the officers and members of the Michigan State Medical Society to attend this Conference, and assures all a hearty welcome.

* * *

Afflicted Child Commitments: August, 1936—971 Cases, of which 250 went to University Hospital. Included in this total of 971 cases were 259 commitments from Wayne County, of which 31 were sent to the University Hospital. In July, 923 cases were committed, of which 253 went to University Hospital. In June, 903 cases were committed, of which 259 went to University Hospital. In May, 1,325 cases were committed, of which 262 went to University Hospital.

* * *

The Highland Park Physicians' Club will hold its 11th Annual Clinic at the Highland Park General Hospital on December 2, 1936. Among those on the program are Drs. Dean Lewis of Baltimore; George Crile of Cleveland; A. T. Bedell of Albany; C. A. Aldrich of Chicago; F. F. Tisdale of Toronto; H. L. Kretschmer of Chicago; L. J. Harris of Toronto; and Prof. Curtis of Columbus, O. For further information and a program write the Highland Park Physicians' Club, c/o The Highland Park General Hospital, Highland Park, Michigan.

* * *

The 1936 Post-graduate Extension Course of the Michigan State Medical Society and the University of Michigan Department of Postgraduate Medicine was inaugurated on October 5. The course continues for eight weeks, one day each week in Bay City, Traverse City—Manistee—Cadillac, Flint, Grand Rapids, Battle Creek—Kalamazoo, and Lansing—Jackson. Programs have been mailed to every physician in the state. For additional information, write the Department of Postgraduate Medicine, University Hospital, Ann Arbor.

* * *

The State Society Committee Studying Fee Schedules A, B, C, and D, presented its findings to the Michigan Crippled Children Commission on September 17, 1936.

The Crippled Children Commission is now taking up the matter with the State Administrative Board and with the Auditor General, as the fees are determined jointly by the Crippled Children Commission and the above-mentioned officials of the State

of Michigan. Upon final adoption of the amended fee schedules, THE JOURNAL will publish same in detail so that every member of the Michigan State Medical Society will have a copy available on his desk.

* * *

American Board of Obstetrics and Gynecology.—The next written examinations and review of case histories of Group B applicants by the American Board of Obstetrics and Gynecology will be held in the various cities in the United States and Canada, on Saturday, November 7, 1936, and on Saturday, March 6, 1937.

The next general examination for all candidates (Groups A and B) will be held in Atlantic City, N. J., on June 8 and 9, 1937.

Application blanks and booklets of information may be obtained from Dr. Paul Titus, Secretary, 1015 Highland Building, Pittsburgh (6), Pennsylvania. Applications for these examinations must be filed in the Secretary's office not later than sixty days prior to the scheduled date of examination.

* * *

Seventh Annual W. C. M. S. Golf Tournament a Success—Golf was the main topic for the Wayne County Medical Society on the 26th of August, 1936. The Seventh Annual Tournament was staged on that date at the Birmingham Golf Club and drew a large and enthusiastic crowd.

The event exceeded all expectations, furnished several grand hours for the physician golfers and their friends and placed the day in the realm of pleasant memories for all. One hundred and eighty-seven golfers played eighteen or more holes of golf, and in the evening two hundred and ten were seated for the dinner and to hear the announcements of laurels won.

Mr. Wm. J. Burns acted as toastmaster and presented the prizes, enumerating fittingly on the high-lights pertaining to the trophies. Dr. Claude G. Burgess led the field and was awarded the Holmes Trophy, significant of the W. C. M. S. Golf Championship. Chairman W. R. Clinton and the Golf Committee ably assisted by James A. Bechtel, Acting Executive Secretary of the Society, are to be congratulated on the efficient marshalling of the infinite details and the good management in bringing the 1936 party to a successful conclusion.

* * *

Refresher Courses: Dr. Alexander M. Campbell of Grand Rapids is conducting a "refresher course" in Obstetrics for six weeks. He will devote his whole time to this post-graduate effort which began September 28 and will continue to November 7, 1936.

Dr. Campbell's weekly schedule will be as follows:

Traverse City—Lecture, Mon. evening; (first lecture, Sept. 28, 8:00 p. m.).

Traverse City—Consultation, Tues. morning; (first consult., Sept. 29, 9:00 a. m.).

Petoskey—Lecture, Tues. evening; (first lecture, Sept. 29, 8:00 p. m.).

Petoskey—Consultation, Wed. morning; (first consult., Sept. 30, 9:00 a. m.).

Alpena—Lecture, Wed. evening; (first lecture, Sept. 30, 8:00 p. m.).

Alpena—Consultation, Thurs. morning; (first consult., Oct. 1, 9:00 a. m.).

Grayling—Lecture, Thurs. evening; (first lecture, Oct. 1, 8:00 p. m.).

Grayling—Consultation, Fri. morning; (first consult., Oct. 2, 9:00 a. m.).

These intensive post-graduate courses are paid for out of Social Security funds. They are sponsored and arranged by the Maternal Health Committee of the Michigan State Medical Society and the State Department of Health. Future refresher courses in other subjects, such as Pediatrics, will depend on the attendance at these initial conferences.

The officers of the Michigan State Medical Society urged the inauguration of these refresher courses for physicians who have patients in rural areas.

Dr. C. C. Slemons, State Health Commissioner, will appreciate hearing from members with suggestions and ideas for future courses to fit the needs of particular communities.

* * *

Post-graduate Courses in Medicine—The Department of Post-graduate Medicine of the University of Michigan and the Michigan State Medical Society has announced courses for practitioners in the following centers in the state: Bay City, Traverse City-Manistee-Cadillac, Flint, Grand Rapids, Battle Creek-Kalamazoo, Lansing, Jackson. The courses begin the first week in October and continue for eight weeks. The following subjects will be discussed: Diseases of Circulation, Allergic Diseases, Psychoneuroses, Pneumonia, Appendicitis, Diseases of the Breast, Accidental Injuries, X-rays in Modern Medicine, Ulcerative Lesions of the Gastro-Intestinal Tract, Gynecology and Obstetrics, Diseases of the Skin, Urinary Tract Obstructions, Diseases of the Ear, and Diseases of the Eye.

By writing the Department of Post-graduate Medicine, University of Michigan, detailed information will be sent in the form of folders, giving more specific information regarding the scope of the various subjects and also the personnel of the extra-mural lecture staff.

Bay City (Mercy Hospital), October 5, 10:00 A. M., Pathology, Dr. John C. Bugher; 1:00 P. M., Circulatory Disease, Diagnosis and Management, Dr. Paul S. Barker. *October 12*, 10:00 A. M., The Allergic Diseases, Dr. Reuben L. Kahn; 1:00 P. M., Allergic Diseases, Dr. John M. Sheldon. *October 19*, 10:00 A. M., The Psychoneuroses, Dr. Fred P. Currier; 1:00 P. M., Pneumonia, Dr. Richard M. McKean. *October 26*, 10:00 A. M., Appendicitis, Diseases of the Breast, Dr. Harold K. Shawan; 1:00 P. M., Injuries, Dr. Walter G. Maddock. *November 2*, 10:00 A. M., Importance of X-rays in Modern Medicine, Dr. Carleton B. Peirce; 1:00 P. M., Ulcerative Lesions of Gastro-intestinal Tract. Clinical Management, Dr. Henry Field, Jr. *November 9*, 10:00 A. M., Malpositions of the Uterus, Dr. Jean P. Pratt; 1:00 P. M., Post-partum Infection, Dr. Ward F. Seeley. *November 16*, 10:00 A. M., Diseases of the Skin, Dr. Udo J. Wile; 1:00 P. M., Urinary Tract Obstructions, Dr. Reed M. Nesbit. *November 23*, 10:00 A. M., Diseases of the Ear, Dr. Albert C. Furstenberg; 1:00 P. M., Diseases of the Eye, Dr. Dean W. Myers.

Battle Creek-Kalamazoo (Borgess Hospital, Kalamazoo), *October 6*, 10:00 A. M., Pathology, Dr. Plinn F. Morse; 1:00 P. M., Circulatory Disease, Diagnosis and Management, Dr. Robert L. Novy. *October 13* (Leila Post Hospital, Battle Creek), Dr. Reuben L. Kahn, Allergic Disease; 1:00 P. M., Allergic Disease, Dr. John M. Sheldon. *October 20* (Borgess Hospital, Kalamazoo), 10:00 A. M., The Psychoneurosis, Dr. Heinrich A. Reye; 1:00 P. M., Pneumonia, Dr. Cyrus C. Sturgis. *October 27* (Leila Post Hospital, Battle Creek), 10:00 A. M., Appendicitis, Diseases of the Breast, Dr. Fredk. A. Collier; 1:00 P. M., Injuries, Dr. Walter G. Maddock. *November 3* (Borgess Hospital, Kalamazoo), 10:00 A. M., Importance of X-rays in Modern Medicine, Dr. Fred J. Hodges; 1:00 P. M., Ulcerative Lesions of Gastro-Intestinal Tract, Clinical Management, Dr. Clyde E. Vreeland. *November 10* (Leila Post Hospital, Battle Creek) 10:00 A. M.; Malpositions of the Uterus, Dr. Lewis E. Daniels, 1:00 P. M., Post-partum Infection, Dr. Hampton P. Cushman. *November 17* (Borgess Hospital, Kalamazoo), 10:00 A. M., Diseases of the Skin, Dr. Robert C. Jamieson; 1:00 P. M., Urinary Tract Obstructions, Dr. Harry W. Plaggemeyer. *November 24* (Leila Post Hospital), 10:00 A. M., Diseases of the Ear, Dr. J. Milton Robb; 1:00 P. M., Diseases of the Eye, Dr. Elmer L. Whitney.

Flint (Hurley Hospital), October 7, 10:00 A. M., Pathology, Dr. Frank W. Hartman; 1:00 P. M., Circulatory Disease, Diagnosis and Management, Dr. F. Janney Smith. *October 14*, 10:00 A. M., Dr. Reuben L. Kahn, Allergic Disease; 1:00 P. M., Allergic Disease, Dr. John M. Sheldon. *October 21*, 10:00 A. M., The Psychoneuroses, Dr. Carl D. Camp; 1:00 P. M., Pneumonia, Dr. Hugo A. Freund. *October 28*, 10:00 A. M., Appendicitis, Diseases of the Breast, Dr. Roy D. McClure; 1:00 P. M., Injuries, Dr. Walter G. Maddock. *November 4*, 10:00 A. M., Importance of X-rays in Modern Medicine, Dr. James H. Dempster; 1:00 P. M., Ulcerative Lesions of Gastro-Intestinal Tract, Clinical Management, Dr. Fredk. G. Buesser. *November 11*, 10:00 A. M., Malpositions of the Uterus, Dr. Harold C. Mack; 1:00 P. M., Post-partum Infection, Dr. Harold Henderson. *November 18*, 10:00 A. M., Diseases of the Skin, Dr. Loren W. Shaffer; 1:00 P. M., Urinary Tract Obstructions, Dr. Robert E. Cumming. *November 25*, 10:00 A. M., Diseases of the Ear, Dr. Carl F. Snapp; 1:00 P. M., Diseases of the Eye, Dr. Don Marshall.

Grand Rapids—*October 8* (St. Mary's Hospital), 10:00 A. M., Pathology, Dr. Carl V. Weller; 1:00 P. M., Circulatory Disease, Diagnosis and Management, Dr. Frank N. Wilson. *October 15* (Blodgett Hospital), Allergic Disease, 10:00 A. M.; Dr. Reuben L. Kahn; 1:00 P. M., Allergic Disease, Dr. John M. Sheldon. *October 22* (Butterworth Hospital), 10:00 A. M., The Psychoneuroses, Dr. Carl D. Camp; 1:00 P. M., Pneumonia, Dr. Douglas Donald. *October 29* (St. Mary's Hospital), 10:00 A. M., Appendicitis, Diseases of Breast, Dr. Charles S. Kennedy; 1:00 P. M., Injuries, Dr. Walter G. Maddock. *November 5* (Blodgett Hospital), Importance of X-rays in Modern Medicine, Dr. Samuel W. Donaldson; 1:00 P. M., Ulcerative Lesions of Gastro-Intestinal Tract. Clinical Management, Dr. Bruce Lockwood. *November 12* (Butterworth Hospital) 10:00 A. M., Malpositions of the Uterus, Dr. Norman F. Miller; 1:00 P. M., Postpartum Infection, Dr. Roger S. Siddall. *November 19* (St. Mary's Hospital), 10:00 A. M., Diseases of the Skin, Dr. George Van Rhee; 1:00 P. M., Urinary Tract Obstructions, Dr. Fredk. H. Cole. *December 3* (Blodgett Hospital), Diseases of the Ear, 10:00 A. M., Dr. James H. Maxwell; 1:00 P. M., Diseases of the Eye, Dr. Don M. Campbell.

Lansing-Jackson, *October 8* (Sparrow Hospital, Lansing), 10:00 A. M., Circulatory Disease, Dr. James E. Davis; 1:00 P. M., Circulatory Disease, Dr. Edw. D. Spalding. *October 15* (Foote Hospital), Jackson, 10:00 A. M., Appendicitis, Diseases of the Breast, Dr. Clair F. Vale; 1:00 P. M., Injuries, Dr. Walter G. Maddock. *October 22* (St. Lawrence Hospital, Lansing), 10:00 A. M., The Psychoneuroses, Dr. Heinrich A. Reye; 1:00 P. M., Pneumonia, Dr. A. Hazen Price; *October 29* (Mercy Hospital, Jackson), 10:00 A. M., Diseases of the Skin, Dr. Harther L. Keim; 1:00 P. M., Urinary Tract Obstructions, Dr. Wm. E. Keane. *November 5* (Sparrow Hospital, Lansing), 10:00 A. M., Importance of X-rays in Modern Medicine, Dr. Howard P. Doub; 1:00 P. M., Ulcerative Lesions of Gastro-Intestinal Tract. Clinical Management, Dr. Frank J. Sladen. *November 12* (Foote Hospital, Jackson), 10:00 A. M., Malpositions of the Uterus, Dr. George A. Kamperman; 1:00 P. M., Post-partum Infection, Dr. Alexander M. Campbell. *November 19* (St. Law-

rence Hospital, Lansing), 10:00 A. M., Allergic Diseases, Dr. Reuben L. Kahn; 1:00 P. M., Allergic Diseases, Dr. John M. Sheldon. *December 3* (Mercy Hospital, Jackson), 10:00 A. M., Diseases of the Ear, Dr. H. Lee Simpson; 1:00 P. M., Diseases of the Eye, Dr. Parker Heath.

Traverse City-Cadillac-Manistee, October 9 (Munson Hospital, Traverse City), 10:00 A. M., Pathology, Dr. Osborne A. Brines; 1:00 P. M., Circulatory Disease, Diagnosis and Management, Dr. Douglas Donald. *October 16* (Mercy Hospital, Cadillac), 10:00 A. M., Allergic Disease, Dr. Reuben L. Kahn; 1:00 P. M., Pneumonia, Dr. John M. Sheldon. *October 23* (Munson Hospital, Traverse City), 10:00 A. M., The Psychoneuroses, Dr. Russel N. DeJong; 1:00 P. M., Pneumonia, Dr. Gordon B. Myers. *October 30* (Mercy Hospital, Manistee), 10:00 A. M., Appendicitis, Diseases of the Breast, Dr. Henry J. Vanden Berg; 1:00 P. M., Injuries, Dr. Walter G. Maddock. *November 6* (Mercy Hospital, Cadillac), 10:00 A. M., Importance of X-rays in Modern Medicine, Dr. Vernon M. Moore; 1:00 P. M., Ulcerative Lesions of Gastro-Intestinal Tract, Clinical Management, Dr. Herman H. Riecker. *November 13* (Mercy Hospital, Manistee), 10:00 A. M., Malpositions of the Uterus, Dr. Norman R. Kretschmar; 1:00 P. M., Postpartum Infection, Dr. Howard H. Cummings. *November 20* (Munson Hospital, Traverse City), 10:00 A. M., Diseases of the Skin, Dr. George H. Belote; 1:00 P. M., Urinary Tract Obstructions, Dr. Wm. J. Butler. *November 22* (Mercy Hospital, Cadillac), 10:00 A. M., Diseases of the Ear, Dr. Ferris Smith; 1:00 P. M., Diseases of the Eye, Dr. F. Bruce Fralick.

* * *

THE AMERICAN BOARD OF INTERNAL MEDICINE (Inc.)

The American Board of Internal Medicine, incorporated February 28, 1936, completed its organization on June 15, 1936. The officers chosen were Walter L. Biering, M.D., Des Moines, Chairman; Jonathan C. Meakins, M.D., Montreal, Vice Chairman, and O. H. Perry Pepper, M.D., Philadelphia, Secretary-Treasurer. These officers, with the following six members, constitute the present membership of the board: David P. Barr, M.D., St. Louis; Reginald Fitz, M.D., Boston; Ernest E. Irons, M.D., Chicago; William S. Middleton, M.D., Madison; John H. Musser, M.D., New Orleans, and G. Gill Richards, M.D., Salt Lake City.

The term of office of each member will be three years, and no member can serve more than two consecutive three-year terms.

The organization of the Board is the result of effective effort on the part of the American College of Physicians in conjunction with the Section on Practice of Medicine of the American Medical Association and these two organizations are represented in the membership of the Board on a five to four ratio respectively.

The American Board of Internal Medicine had previously received the official approval of the two bodies fostering its organization, as well as that of the Advisory Board of Medical Specialties and the Council on Medical Education and Hospitals of the American Medical Association.

The purpose of the Board will be the certification of specialists in the field of internal medicine, and the establishment of qualifications with the required examination procedure for such certification.

While the Board is, at present, chiefly concerned with the qualification and procedure for certification in the general field of internal medicine, it is intended to inaugurate immediately after July 1, 1937, similar qualification and procedure for additional certification in certain of the more restricted and

specialized branches of internal medicine, as gastroenterology, cardiology, metabolic diseases, tuberculosis, allergic diseases, et cetera. Such special certification will be considered only for candidates who have passed at least the written examination required for certification in general internal medicine. The operation of such a plan will require the active participation and cooperation of recognized representatives from each of such special fields of medicine.

Each applicant for admission to the examination in internal medicine will be required to meet the following standards:

General Qualifications

1. Satisfactory moral and ethical standing in the profession.
2. Membership in the American Medical Association or, by courtesy, membership in such Canadian or other medical societies as are recognized for this purpose by the Council on Medical Education and Hospitals of the American Medical Association. Except as here provided, membership in other societies will not be required.

Professional Standing

1. Graduation from a medical school of the United States or Canada recognized by the Council on Medical Education and Hospitals of the American Medical Association.
2. Completion of an internship of not less than one year in a hospital approved by the same council.
3. In the case of an applicant whose training has been received outside of the United States and Canada, his credentials must be satisfactory to the Advisory Board for Medical Specialties and the Council on Medical Education and Hospitals of the American Medical Association.

Special Training

1. Five years must elapse after completion of a year's internship in a hospital approved for interne training before the candidate is eligible for examination.
2. Three years of this period must be devoted to special training in internal medicine. This requirement should include a period of at least several months of graduate work under proper supervision in anatomy, physiology, biochemistry, pathology, bacteriology, or pharmacology, particularly as related to the practice of internal medicine.

This work may be carried on in any domestic or foreign medical school or laboratory recognized by the Council on Medical Education and Hospitals of the American Medical Association as offering appropriate facilities for this type of postgraduate experience; or it may include a period of at least several months of graduate work under proper supervision in internal medicine or in its restricted and specialized branches in any domestic or foreign hospital, clinic, or dispensary, recognized by the above Council as offering appropriate facilities for this type of postgraduate experience.

3. A period of not less than two years of special practice in the field of internal medicine or in its more restricted and specialized branches.

The American Board of Internal Medicine does not propose to establish fixed rules for the preliminary training of candidates for certification in this field. Broad general principles for training, however, may be outlined, although such suggestions as are made must, of

necessity, be subject to constant changes reflecting the dynamic nature of the specialty.

A sound knowledge of physiology, biochemistry, pharmacology, anatomy, bacteriology, and pathology, in so far as they apply to disease, is regarded as essential for continued progress of the individual who practices internal medicine. The more factual knowledge of medicine and its basic sciences is not sufficient. The candidate must have had training in their use in furthering his understanding of clinical medicine. This implies practical experience under the guidance of older men who bring to their clinical problems ripe knowledge and critical judgment. Preparation to meet this requirement adequately may be even more difficult to obtain than the so-called scientific training. It may, however, be acquired in the following ways:

- (a) By work in a well-organized hospital outdoor clinic conducted by competent physicians.
 - (b) By a prolonged period of resident hospital appointments likewise directed by skilled physicians.
 - (c) By a period of training in intimate association with a well-trained and critical physician who takes the trouble to teach and guide his assistant rather than to require him only to carry out the minor drudgery of a busy practice.
4. The Board does not consider it to the best interests of internal medicine in this country that rigid rules as to where or how the training outlined above is to be obtained. Medical teaching and knowledge are international. The opportunities of all prospective candidates are not the same. Some may have the opportunity of widening their knowledge by a period of study abroad. Others, at the other extreme, may be restricted to a comparatively narrow geographic area and their detailed training must be obtained in short periods scattered over a long time. Although it is laid down that at least five years must elapse between the termination of the first interne year and the time when the candidate is eligible to take the examination, a longer period is advisable. The Board wishes to emphasize that the time and training are but means to the end of acquiring a broadness and depth of knowledge of internal medicine which the candidate must demonstrate to the Board in order to justify it in certifying that he is competent to practice internal medicine as a specialty. The responsibility of acquiring the knowledge as best he may rests with the candidate, while the responsibility of maintaining the standard of knowledge required for certification devolves on the Board.

Method of Examination

The examination required of candidates for certification as specialists in Internal Medicine will comprise Part I (written) and Part II (practical or clinical).

Part I. The written examination is to be held simultaneously in different sections of the United States and Canada and will include:

(a) Questions in applied physiology, physiological chemistry, pathology, pharmacology, and the cultural aspects of medicine.

(b) Questions in general internal medicine.

The first written examination will be held in December, 1936, and candidates successful in this written test will be eligible for the first practical or clinical examination which will be conducted by members of the Board near the time for the annual session of the American College of Physicians at St. Louis in April 1937. The second practical examination will be held at Philadelphia near the time of the annual session of the American Medical Association in Atlantic City in June, 1937.

The fee for examination is forty dollars which must accompany the application and an additional fee of ten dollars is required when the certificate is issued.

Application blanks and further information can be obtained by addressing the office of the chairman, Walter L. Bierring, M.D., 406 Sixth Avenue, Des Moines, Iowa, U. S. A.

* * *

MILITARY SURGEONS MEET IN DETROIT

The 44th Annual Convention of the Association of Military Surgeons of the United States will be held in Detroit on October 29, 30, and 31, 1936. This association was organized forty-five years ago in Chicago. The leading spirit in the organization was the late Nicholas Senn, one of the most noted surgeons in the United States of his time. Dr. Senn, or Colonel Senn, at the time was surgeon-general of the National Guard Organizations of Wisconsin and Illinois. The purpose of a national organization was to improve the character and efficiency of medical staffs; in a word, for the advancement of military and accidental surgery and all things pertaining to the health and welfare of the civilian soldier.

The association, at its inception, was purely a national guard movement and the title of the association first adopted was Association of Military Surgeons of the National Guard. The association publishes its own journal, the *Military Surgeon*, which has a circulation of 4,500 copies. The current number of the *Military Surgeon*, namely, for October, contains a full program of the Detroit meeting as well as a brief description of Detroit. The headquarters will be at the Book-Cadillac Hotel. The fourth floor of the hotel will be devoted to scientific and commercial exhibits. The general scientific sessions will be held in the grand ball room of the hotel. The program is as follows:

WEDNESDAY, OCT. 28:

8:00 P.M.—Meeting of the Executive Council, Book-Cadillac Hotel.

THURSDAY, OCT. 29:

9:15 A.M.—Business meeting of the Association.

OPENING SESSION

10:15 A.M.—Col. Burt R. Shurly, Chairman, Committee of Arrangements, Presiding.

Invocation: Capt. B. W. Pullinger, Chaplain, 107th Med. Regt.

Addresses of Welcome: Hon. Frank D. Fitzgerald, Governor of Michigan.

Hon. Frank Couzens, Mayor of Detroit.

Col. Ralph M. Parker, U. S. Army, Michigan Reserve Division.

Response: Dr. Charles M. Griffith, President of the Association.

Addresses: Major Gen. Charles R. Reynolds, Surgeon General U. S. Army.

GENERAL NEWS AND ANNOUNCEMENTS

Rear Adm. P. S. Rossiter, Surgeon
General U. S. Navy.
Major Gen. Edward Croft, Chief of
Infantry, U. S. Army.
Major Gen. Albert H. Blanding,
Chief Natl. Guard Bureau.
Brig. Gen. Frank T. Hines, Director
of Veterans' Affairs.
Dr. Leroy M. S. Miner, President,
American Dental Assn.
Med. Dir. Bolivar J. Lloyd, U. S.
Public Health Service.
President's Address: Dr. Charles M.
Griffith, Med. Dir. Veterans' Ad-
ministration.

12:30 P.M.—Ladies Luncheon, Book-Cadillac Hotel.
1:30 P.M.—Dr. Philip B. Matz, Chief of Research
Sub-Division, Veterans' Adm.
Subject: Diabetes Mellitus among
Veterans of the World War.
2:00 P.M.—Major Frederick G. Buesser.
Subject: Remarks on the Treat-
ment of Peptic Ulcer. (Lantern
slides.)
2:30 P.M.—Lieut. Col. Frederick A. Collier.
Subject: Gas Bacillus Infection in
Civil Life.
3:00 P.M.—Lieut. Col. Leigh C. Fairbanks, D.C.,
U. S. Army.
Subject: Medical and Dental Liai-
son in the Military Forces.
3:30 P.M.—Visits to hospitals and laboratories.
8:00 P.M.—Smoker.

FRIDAY, OCT. 30:

9:30 A.M.—Lieut. Col. Stanley W. Clark, Dent.
Res., Chairman, Dental Section,
Association of Military Surgeons.
Subject: Recent Research in Local
Anesthesia with Reference to the
Development of the Alkaline So-
lution.
10:00 A.M.—Lieut. Col. Walter C. Darling, Med.
Res., U. S. Army.
Subject: Suggested Plan for Mod-
ernization of Transport Service
of a Medical Regiment. (Lantern
slides.)
10:30 A.M.—Lieut. Comdr. W. W. Hall, M.C.,
U. S. Navy.
Subject: Active Immunization
Against Tetanus with Tetanus
Toxoid.
11:00 A.M.—Lieut. Col. Orville E. McKim, Vet.
Res., U. S. Army.
Subject: The Service of the Vet-
erinary Corps in the Motorized
Combat Armies.
11:30 A.M.—Lieut. Col. Albert G. Hulett, Med.
Res., U. S. Army.
Subject: Chapters and their Rela-
tion to the Association.
1:30 P.M.—Major F. C. Kidner, Med. Res., U. S.
Army.
Subject: What England and Can-
ada are doing for the Disabled
War Veterans.
2:00 P.M.—Major Irwin B. March, M.C., U. S.
Army.
Subject: Aviation Medicine.
2:30 P.M.—U. S. Public Health Service—Speaker
and subject to be announced.
3:00 P.M.—Personally conducted trip to Green-
field Village.

SATURDAY, OCT. 31:

9:30 A.M.—Brig. Gen. George W. Crile, Med.
Res., U. S. Army, Cleveland Clinic.
Subject: Eighteen Years After.
11:00 A.M.—Business meeting.
1:30 P.M.—Visit to Selfridge Field. Transporta-
tion leaving hotel entrance at 1:30
P. M. Sharp.
8:30 P.M.—Annual Banquet.

Local Committees on Arrangements

General Chairman—Colonel Burt R. Shurly, M.C. Res.
Secretary and Treasurer—Surgeon Walter J. Cree
U.S.P.H.S., Res.

Entertainment Committee

Chairman—Col. John D. Buck, M.C., Mich. N.G.
Lieut. Col. Carl Hanna, M.C., Mich. N.G.
Surgeon W. Y. Hollingsworth, U.S.P.H.S.
Major Irwin B. March, M.C., Army.
Major Harrison B. Stucky, M.C., Army.
Major T. K. Gruber, M.C., Res.
Major E. Carlton Fox, D.C., Res.
Captain E. O. Sage, Vets. Administn.
Lt. Comnd. J. E. Malcomson, M.C., Navy.

Membership Committee

Chairman—Maj. Bernard Friedlaender, M.C., Res.
Captain Harry S. Berman, M.C., Res.

Exhibits Committee *Commercial*

Chairman—Lieut. Col. Bror H. Larsson, M.C., Res.
Captain Clarence D. Moll, M.C., Res.
Lieut. Comnd. Elwood A. Sharp, M.C., Navy Res.
Lieut. Howard K. Shrom, M.C., Res.

Scientific

Chairman—Lieut. Col. Wm. H. Gordon, M.C., Res.
Major Frank S. Matlack, M.C., Army.
Lieut. Comnd. Henry S. Brown, M.C., Navy Res.
Dr. Henry F. Vaughan, Health Commissioner.

Ways and Means Committee

Chairman—Brig. Genl. Fred T. Murphy, M.C., Res.

Program Committee

Chairman—Col. Grover T. Penberthy, M.C., Res.
Captain Charles E. Lemmon, M.C., Res.
Captain Edward D. Spalding, M.C., Res.

Auditing Committee

Chairman—Col. Louis J. Hirschman, M.C., Res.

Reception Committee

Chairman—Col. Angus McLean, M.C., Res.
Major Erskine Hume, M.C., Army.
Col. Roland H. Parmenter, M.C., Res.
Lieut. Col. Henry R. Carstens, M.C., Res.
Major Andrew P. Biddle, M.C., Res.
Major Earl Barkley, M.C., Res.
Major John C. Dodda, M.C., Res.
Major Bruce C. Lockwood, M.C., Res.
Major Robert G. Owen, M.C., Res.
Captain H. P. Cushman, M.C., Res.

Publication Committee

Chairman—Major Orlando W. Pickard
Dr. J. H. Dempster, STATE MED. JOURNAL
Dr. David I. Sugar, *Medical News*
Mr. Malcolm W. Bingay, *Detroit Free Press*
Mr. A. M. Smith, *Detroit News*
Mr. John C. Manning *Detroit Times*
Major Cyril K. Valade

Lay Committee

Chairman—Major O. Z. Ide
Brig. Genl. H. A. Pickert
Col. Oscar W. Smith

THE DOCTOR'S LIBRARY

Major Charles T. Sawyer
Commd. R. Thornton Brodhead
Hon. Truman Newberry
Capt. Frederick F. Stearns
Major Edward F. Hinkle
Mr. William S. Knudsen

Ladies Entertainment Committee

Chairman—Mrs. Burt R. Shurly
Mrs. R. Thornton Brodhead
Mrs. Walter J. Cree
Mrs. John D. Buck
Mrs. O. Z. Ide
Mrs. Angus McLean
Mrs. H. A. Pickert
Mrs. Howard K. Shrom

Scientific Exhibits

The scientific displays promise to be most interesting and instructive. They will include displays from the following:

Medical Corps U. S. Army
Medical Corps U. S. Navy
U.S.P. Health Service
U. S. Veterans Administration
University of Michigan
Detroit Board of Health
University Hospitals of Cleveland, Ohio
Tissue Immunity—Dr. Ruben L. Kahn
Contest in Field Laboratory
Receiving hospital of Detroit Bronchiogenic Carcinoma
Drs. E. A. Sharp and William H. Gordon
Hemologic and Anemia Material
Agranulocytosis
Hypoglycemia in the Infant
Treatment of burns—Dr. Grover Penberthy

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column and this will be deemed by us a full compensation to those sending them. A selection will be made for review, as expedient.

THE EYE AND ITS DISEASES. By 82 International authorities. Edited by Conrad Berens, M. D., Ophthalmic Surgeon, Pathologist and Director of Research, New York Eye and Ear Infirmary; Special Research, New York Eye and Ear Infirmary; Special Consulting Ophthalmologist, Woman's Hospital; Consulting Ophthalmologist, Veterans Administration Facility, New York; Lecturer in Ophthalmology, New York Eye and Ear Infirmary; Member of American Board of Ophthalmology; Member of the Society of Surgeons of Paris; Lieutenant-Colonel, M. R. C., U. S. Army. 1254 pages with 436 illustrations, some in colors. Philadelphia and London: W. B. Saunders Company, 1936. Cloth, \$12.00 net.

This general textbook on Ophthalmology answers a definite need. It is readable, concise, and up to date, and covers every aspect of practical Ophthalmology. The chapters on Aniseikonia and Retinal Detachment contain material not to be found in other standard texts. Eighty-two of the best known authors in Ophthalmology have contributed to this volume. The majority of the contributors, authorities on general Ophthalmology, have been chosen to submit material on subjects with which they are particularly familiar and on which they have written. They have stated facts that are of practical use to every ophthalmologist and have done so leaving out needless and time consuming detail elsewhere to be found when needed.

Whether viewed from the standpoint of the beginner or the experienced ophthalmologist we can see in this book a volume that will be reached for on the desk or shelf with the confidence that

characterizes one's attitude toward Fuchs and DeSchweinitz in Ophthalmology or Osler in medicine. We congratulate Dr. Berens and his collaborators.

A TEXTBOOK OF HISTOLOGY. By Joseph Krafka, Jr., Ph.D., M.D., Professor of Microscopic Anatomy, University of Georgia School of Medicine, Augusta. 246 pages, 95 figures. Baltimore: Williams & Wilkins Co., 1936. \$2.50.

This is a concise treatment of microscopic anatomy characterized particularly by an attempt to correlate information on histology, function and points of practical importance. It consists of thirty-six short chapters each devoted to characteristic organs or tissues. Though unorthodox in treatment, the work is quite well done. It is a question, however, whether certain chapters might not be beyond the premedical or general biological student for whom the book is written. As an auxiliary text for the medical student or as a brief review of microscopic anatomy for the physician, the book should prove stimulating and of value.

THE STUDY OF ANATOMY. WRITTEN FOR THE MEDICAL STUDENT. By S. E. Whitnall, M.A., M.D., B.Ch. (Oxon.), M.R.C.S., L.R.C.P., F.R.S. (Canada), Professor of Anatomy at the University of Bristol, 1935; Professor of Anatomy in McGill University, 1919; University Demonstrator at Oxford, 1908. 113 pages. Third edition revised and enlarged. Baltimore: Wm. Wood & Co., 1936. \$1.75.

Gross anatomy as the first unit of the medical curriculum provides a pacemaker for subsequent courses. From the beginning of his dissection, the student is enmeshed in countless details of arteries, nerves, lymphatics, muscles and organ systems, and as he progresses, the details accumulate. The synthesis of an adequate concept of body structure is a real task. The course is without precedent in the student's experience. Previous courses in literary college are organized so that students can read their texts from chapter to chapter and acquire a synthesized view; anatomy is conditioned by the requirements of studying structures in the order that they are most conveniently dissected.

This little book written for the premedical or first year student is designed to help him over the difficult transition period. He is provided with a helpful viewpoint and taught how to distinguish the significant from the unimportant, how to work and how to study. Textbooks, examinations and instructors are discussed. All in all, the student will find here information which will make it easier for him to adapt himself not only to anatomy, but to subsequent medical courses.

ENDOCRINOLOGY IN MODERN PRACTICE. By William Wolf, M.D., M.S., Ph.D. 1018 pages, with 252 illustrations. Philadelphia and London: W. B. Saunders Company, 1936. Cloth, \$10.00 net.

This rather extensive work provides an account of the development, anatomy, histology, function and chemistry of each of the conventional glands of internal secretion and of the mammary gland. As each organ is considered, the diseases affecting it are dealt with from the standpoint of etiology, pathology, symptoms, diagnosis, prognosis and treatment. An interesting chapter is devoted to hormones produced in the liver, stomach, duodenum and other organs not ordinarily classed as endocrine. The author treats of the endocrine and medical aspects of obesity, menstrual disorders, the menopause, pregnancy and sterility. An extensive section is concerned with the endocrine relationships in "non-endocrine" diseases, such as surgical and mental diseases and diseases of children. The last quarter of the book is concerned with endocrine diagnosis and the use and action of endocrine preparations.

THE JOURNAL

OF THE

Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. 35

NOVEMBER, 1936

No. 11

SOCIETY AND ORGANIZED MEDICINE*

CHARLES GORDON HEYD, B.A., M.D., F.A.C.S.†

NEW YORK, NEW YORK

Society, meaning thereby the sum total of all of the activities of its members, is activated by a definite organic law. It exhibits the biological evolution of progressive gradations from a simple to a complicated organization. In this development the individual members of society have at all times, in varying degrees, required medical services. It is the duty of physicians, individually and officially through their state and national medical associations, to safeguard that service and to protect the public from malign invasions from non-medical sources.

I. The fundamental object of medical practice is to provide and make available adequate, effective and efficient medical service at all times for every member of the community, regardless of race, color or creed.

II. In general, medical service as provided today is in a large measure effective and efficient although not always adequate or available.

III. The payment to physicians for medical service is not the large item in the so-called cost of medical care, as less than 50 per cent of hospital patients pay any fee to their doctor.

IV. There is no logical reason for believing that the professional item for adequate and effective medical service in the cost of medical care can be materially lessened or reduced. On the contrary there are many reasons for believing that it will be increased, as it must eventually have added to it a charge for professional services.

V. The doctor is a citizen and must discharge all of his obligations of citizenship the same as any other member of the community.

VI. The doctor is entitled to a monetary return for his labor that is fair and commensurate with his services, training and experience. The fact that the practice of medicine is a profession does not mean that the doctor shall continue to work under a system that is ethically wrong and economically unsound. The doctor must be paid for his services in order to function as a useful and contributing member of society.

The cost of the professional item in medical care is not excessive but rather moderate when compared with other items in the cost of living and the enjoyment of luxuries. The cost will not diminish but tend to increase because it must include a fair and adequate compensation for the professional service rendered by the doctor. To continuously and constantly keep on increasing the load upon the backs of the individuals who do and must pay, and at the same time increase the number of those who are carried free when able to pay, means a breakdown in the social economic machine.

*Delivered at the annual meeting of the Michigan State Medical Society, Detroit, Michigan, September 22, 1936.

†Dr. Heyd graduated, B.A., from the University of Toronto, 1905; and M.D., Buffalo, 1909. He served as interne and House Surgeon, New York Post-Graduate Medical School and Hospital. He had war service, A.E.F., two years, from which he retired as Major. He was president, Medical Society of the County of New York, and president, Medical Society of the State of New York. He is at present president of the American Medical Association.

The medical service provided by the doctors in the last thirty years has on the whole been effective as is indicated by a study of the mortality rate in 1900 as compared to the mortality rate in 1925. If the medical service given to the middle class (white collars) was ineffective or inadequate, then we should expect to find that as a class they suffered from such defects of medical service. This is not apparent because the decline in modern mortality is impressive. Mr. Wolman has calculated that, based on the death rate obtaining at the beginning of the century, in 1925 there would have died 1,962,999 persons, but actual deaths were only 1,398,673 persons, an actual saving of 573,326 lives.

The history of the United States exhibits in many of its details the progressive changes whereby society has advanced from a simple form to that of a complex organization. From the founding of America at two significant points—New England and Virginia—there was a progressive evolution of the individual as such into groups. For almost a century individualism remained the distinctive quality of American life. Later the individual was to pass into a group as a result of two distinctive social conditions: (1) industrialization with urban concentration and (2) the closure of the western frontier. Jackson in his "The Frontier in American History" interpreted these social forces in terms of American democracy. Without straining at phrase making, one may in some measure discuss a frontier in medical practice. At the time of the American Revolution medical practice was developing as a native product with representative practitioners exhibiting qualities of high courage and great medical character. McDowell in 1809 performed the first reported oöphorectomy; he was preeminently an individualist in the practice of medicine, possessing all the workable knowledge in medicine of his day, plus the pioneer and exploring spirit which today might be called the spirit of research and discovery. Our physicians of that day turned to the great medical centers of Europe; Paris—which gave inspiration to the New England schools of medicine, and later to Edinburgh which is more properly identified with the development of the medical schools of Philadelphia and Canada. In 1790, 90 per cent of our people were engaged in agriculture. In 1850 one-half of

the total wealth of our country was farm wealth. In 1890, 30 per cent of our population were farmers. In the intervening one hundred years America exhibited two fundamental traits of organized social development. First, the rise of the city with a more industrialized north, and which became a significant prelude to the Civil War, and secondly, the westward extension of the frontier—the individualist—the pioneer crossing our Western mountains in successive waves and finally reaching the Pacific. By 1890 all the free lands had been preempted by settlers and the individual and pioneer stage of American life became moulded into various forms by the development of "pressure groups." Since 1890 our population has doubled and our graduate students of institutions of higher learning increased over 1600 per cent, representing a huge upsurging of highly trained individuals. In 1905 we had 165 medical schools and today 65, yet the number of physicians graduated annually is approximately the same as when 165 medical schools were in existence. Our annual production of doctors exceeds our annual death rate of physicians by some 1,400.

Medicine, both in practice and as a part of pure science, utilizes every discovery in physical science which may prove useful in the broad field of medical practice. Medicine again is unique in that its own professional discoveries may be and are utilized by non-medically trained technical experts and put into practice for the prevention of disease. The discovery of the bacillus typhosus and the knowledge that typhoid was a water-borne disease enabled the hygienic engineer to protect the source of drinking water, and practically annihilated typhoid fever. The discovery of the role of the mosquito in the transmission of malaria and yellow fever by physicians made possible the building of the Panama Canal and changed a "plague spot" into one of the healthiest areas in the world.

One would indeed be blind and thoughtless if he were to assume that the general domain of medicine would not participate in some of the fundamental changes that came into business. From 1900 the idea of "bigness" became imbedded in the minds of most of our people, with the corollary that bigness, per se, represented increasing social values in medical practice. Medical service cannot be fabricated like an automo-

bile. Modern industry has demonstrated that in the mechanical arts fabrication is possible and the final product is exactly the same irrespective as to the number of units produced. It is an automatic procedure and the cost of production can be cheapened by mass production. Curative medicine is not the fabrication nor the assembling of parts. It is the study of a disease in an individual with his own peculiar personality and hereditary background, under varying conditions of environment and financial competency. Preventive medicine to a certain extent is capable of responding to the application of mass production. Patients' secretions may be analyzed, temperatures taken, physical examinations made, complete X-ray surveys carried out. All the data can be put on cards so that you have a complete record of the individual's physical state. But, you cannot cure that patient or tell him how to live by handing him a slip of paper, advise him to read it and carry out his own treatment, his own preventive medicine. At some place in the final analysis there must be a personal touch and a psychological evaluation of the patient in regard to the advice that is given to him.

It is not my purpose to argue whether the sum total of benefits derived from mere "bigness" have been warranted, but rather to indicate that the practice of medicine has of necessity been obliged to conform to the power of superior social organization.*

The increasing effectiveness of the automobile has made good roads inevitable and in our populous states there exists no such condition as rural practice, and medical practice has been largely located in our big cities. The beneficent climate has, for example, attracted so many physicians to California that the unit of population per physician is numerically so small as to have introduced severe social and economic problems for the physician, quite aside from either his ability, training or medical aptitude.

The development of Workmen's Compensation Insurance in most of our states has necessitated many changes in medical practice. For example, the state of New York in its desire to protect workmen injured in industry, in 1911 passed the first Workmen's Compensation Act. Injuries and impairment of function were made a direct charge upon industry. Up to this time industry was little concerned with the practice of

medicine. The larger monopolistic industries began immediately to develop medical services of their own type and manufacturers of lesser importance entered into a contract practice with the local physicians. This became so prevalent that in some states—West Virginia—it is stated that 25 per cent of the practitioners are employed on a contract basis with various types of industry.

In the two decades following the enactment of the Workmen's Compensation Law in New York, the abuse of medical practice, the prolongation of illness, resulted in such widespread abuses that the Governor of the State of New York appointed a Commission to inquire into all phases of Workmen's Compensation. It is significant that the Governor turned to Organized Medicine and appointed a medical commission which, after laboring for eighteen months, made a report in 1934 and which resulted in the amendment of the Workmen's Compensation Law. This amended Law was significant in a number of particulars: (1) it recognized the Medical Society of the State of New York as the official governing body of the physicians; (2) in the Law the President of the Medical Society of the State of New York was charged with devising a classification and rating as to the competency of the physicians engaging in Workmen's Compensation practice; (3) The Medical Society was to recommend to the Commissioner of Labor a fee schedule; (4) there was to be created in each county a tribunal for review and hearing of complaints; (5) the patient was to have free choice of his doctor. In this Law we see the legal association of the organized medical society with the State in distributing effective medical service to a special class of its citizens. This phase of social change is significant of the evolutionary process of medicine. I was personally in contact with all of the details that preceded the amended Law and am in a position to inform you that the medical profession of the State of New York were given the fullest and widest power in connection with the Law and to the satisfaction of the citizens, the Medical Society of the State of New York and to the physicians.

The story of physicians is perhaps as accurate an expression of the social conditions in various times in history as any

index could be. Irrespective as to the ancient society, be it Roman or Grecian, the doctor was, as a group, set off from the rest of society. It is almost universally acknowledged that the training a young man receives in the practice of medicine develops discipline, studious and sober habits, and increases his moral worth to the community. In addition, his internship and the personal service in treating sick people in some measure enhances the quality of his citizenship and enlarges his ethical concepts. His services are without time limits and have been dispensed freely at all periods of human history. Yet the physician participates in all of the obligations that society imposes upon him and is susceptible to the various defects of judgment, occasionally of honesty and character, to which all flesh, in some measure at least, is heir. At an early period of history the physician individually and collectively developed a special mental viewpoint in regard to society. This became organized into a system of ethics, the basic principles of right action—"Do unto others as you would that they should do unto you." Side by side with this ethical conception of medicine there arose certain civil codes of practice. In 2600 B.C. the Code of Hammurabi indicated by its penalties that some sort of control was exercised by society upon the practicing physician. Undoubtedly this was a civil code prescribed by the then existing authorities and had in it all of the rigors of penalism. It was succeeded after 2,000 years by the Hippocratic Oath and when physicians pledged themselves by this Oath they merged their individual personalities into a medical organization. From the time of Galen and the intellectual void of the Dark Ages, medicine finally emerged into an era of great medical discoveries. The practice of medicine is universal and donates its discoveries to other physicians the world over. It was natural that the organized medical society should become the clearing house of medical knowledge and health information. The Royal College of London, the Academy of Paris, and the Medical Societies of New England and Philadelphia bear witness to the logical development of this function. From time to time it became necessary for medical societies to embrace new functions in response to the social environment in which they were developed. One of the first ancillary functions was that of legislation where the phy-

sicians were instrumental in obtaining standards for the admission of individuals to practice medicine and at the same time to prevent inadequately educated and improperly trained men from assuming the immemorial functions of a physician. At a slightly later period, a judicial function was assumed by the local medical society, its purpose being to keep a watchful eye upon, let us say, some of its weak, if not erring members.

From 1900 up to the time of the World War marked changes in the economic aspect of the practice of medicine were becoming apparent. It became necessary for medical societies to enter upon another phase of activity. This phase may be broadly spoken of as the economic problem of the practice of medicine.

There are certain problems with relation of the physician to society that must be handled in the county unit—contacts with local boards of health, etc. There are certain problems that must be handled by the State—such as Workmen's Compensation. There are certain problems that must be reserved to the national body—the American Medical Association. It must be apparent that the local unit might have the strength of a medical giant. One has only to bring to mind such a contrast as the local society of ten or twelve members in comparison with the Medical Society of the County of New York, with its four thousand members. It is axiomatic that medical practices, if they be good and found true by experiences, would, by the very nature of things, have a wider application, first in the county, then in the state and finally in the federated body of the United States. So in the course of years, not without struggle, not without occasional obscurity of judgment and not without personal animosity at various times and under varying conditions, there has come into being the national medical organization—the American Medical Association. There is a habit among unrestrained speakers and loose thinkers to talk of "medical trusts" and of "medical politicians" and deride the code of ethics. It must be accepted as a fact that until all too recently many of our most scientific and outstanding physicians have been inclined to indicate that their practice was somewhat superior to medical organization. It is most gratifying to know that this spirit is, to a large extent, passing

away. From time to time we hear a great deal derogatory to medical ethics and within recent times the code of medical ethics has been declared "bunk." Fate, political chance and accident elevate men of varying ability to high places whereby they speak with authority but it does not always follow that the mere elevation of a particular man to a place of political prominence at the same time raises his intelligence or increases his capacity for clear thinking. History records innumerable instances where an individual has abrogated to himself all knowledge and set up a personal opinion as divine wisdom.

An inherent part of the free soul of medical organization is the code of ethics. The code of ethics was devised, given form and longevity and endowed with a soul for the primary purpose of benefit to the community. It defines the duties of a physician to his patients and the fundamental purpose is to protect the patient and to assure to him correct treatment, right conduct and personal responsibility upon the part of the physician. In its broad scope it defines the relation of a physician to another physician, and demands of every member of the Society a high standard of honor, personal integrity and conduct of a gentleman.

Are rules for good conduct and professional practice archaic? Has honesty, courtesy, fair dealing, gentlemanly conduct, good citizenship and the general purpose of the golden rule become archaic, old-fashioned or useless? Hammurabi the wise, Moses the lawgiver, Jesus Christ the loving, Buddha Gautama the dreamer, Confucius the philosopher, Mohammed the militant, all promulgated principles of ethics. Can it be successfully maintained that society would be better without the Ten Commandments? Can anyone believe that society is worse because of the Golden Rule?

The Code of Ethics is a simple collection of precepts for good conduct. It appeals to all physicians for honorable dealing, for good will, courtesy and instinctive honor. It is not archaic, and there is not a single statement in that Code of Ethics that is contrary to our conception of right conduct and good citizenship.

We maintain that the Code of Ethics is an essential part of the practice of medicine and it cannot be lightly discarded and any program that has for its purpose the extinction of the code of ethics conduct be-

tween physician and patient is destructive and against social welfare.

Society has an equal responsibility to the physician. It cannot hamper nor destroy one arm of its organization without grievous injury to its own life and well being.

Society seems to be inundated by a false philosophy that goes by the name of "Security." We may take a short-sighted view of our condition and strive for ephemeral benefits that may in the long run be pernicious and fatal to society. To regiment the medical profession and to confine it within the fixed and arbitrary limitations of state or federal administration, with the interposition of a bureaucratic and politically endowed third party between the patient and the physician, will be to inhibit medical discovery, retard preventive medicine and give inadequate medical treatment to our people. Such a condition will mean that progress in scientific research will be determined by the rude test of utility. Research in pure science will be discarded and scientific progress arrested. This is a short range point of view. A long range point of view in regard to the future of medical progress will take into consideration the greatest number of our population—those individuals still to be born. To look after their interest should be the task ahead of organized medicine. The doctor will be concerned not with the false philosophy of the "abundant life" but with a useful life.

I sometimes wonder if our local societies are not too active in affairs which, while having a local interest to them in their individual capacity, are detrimental to the medical profession as a whole. A local society can pay too dearly for some temporary benefits and lose, as a result of separatism and division of opinion, their secure and useful position in the community.

The history of modern medicine shows an unusual number of special medical societies and in their labors they have reached a high plane of usefulness. The professional specialistic standards which create the specialists in medicine must have a national standardization and it is not without significance that the American Medical Association has set up some fourteen qualified certification or registration boards in order to formulate standards of competency in the various specialties. It is, however, unfortunate that special societies of limited membership and to which all competent physicians with-

in their specialty can never hope to obtain admission, should concern themselves with functions other than scientific medicine.

The contact of physicians with society and with legislative authority must rest with the real structural units of our organization—the County Society, the State Society

and the American Medical Association. The State Medical Societies by means of their delegations to the A. M. A. can assist in arriving at that unanimity of opinion whereby the medical profession may speak as a united body on all questions concerning society and the physician.

COMPARATIVE ANATOMY AND PATHOLOGIC PHYSIOLOGY OF THE ADRENAL-SYMPATHETIC COMPLEX WITH RELATION TO THE GENESIS AND SURGICAL TREATMENT OF ESSENTIAL HYPERTENSION*

GEORGE W. CRILE, M.D.

CLEVELAND, OHIO

If we grant that the adrenal medulla-sympathetic mechanism plays a dual rôle, namely, that of governing the speed of oxidation in the organism and that of speeding instantly the transportation of oxygen to the tissues, then it follows that a pathologic physiology of that part of the adrenal medulla that secretes adrenalin must cause a disease separate and wholly different from a pathologic physiology of the specific mechanism that speeds the circulation of the blood, although one can well see that in certain cases there might be an overflow of activity from one mechanism to the other. A typical sign of a pathologic physiology of the mechanism that speeds the circulation of the blood is a rise in the constant level of the diastolic pressure, that is, essential hypertension. In hyperthyroidism the diastolic pressure remains normal; in hypertension the diastolic pressure is always raised. In hyperthyroidism the pulse pressure is increased; in hypertension the pulse pressure is maintained at the normal ratio. For example, at the normal pressure of 80 diastolic, and 120 systolic, the ratio is 2:3. In a case of hypertension in which the pressure is 140 diastolic and 210 systolic the ratio is still 2:3. In contrast, in hyperthyroidism a diastolic pressure of 70 might be accompanied by a systolic pressure of 140—a ratio of 1:2. Following either thyroidectomy alone or denervation of the adrenal gland alone the pulse pressure falls to normal. This reduction of the pulse pressure to normal is at the expense of the systolic pressure, while the diastolic pressure remains unchanged. Of course, as is to be expected, there are exceptions to this rule.

In hyperthyroidism *the heart rate* is rapidly accelerated; in hypertension the heart rate is usually normal; while in both hyper-

thyroidism and in hypertension the heart thrust is increased. In each the heart is hypertrophied.

Coronary disease is rarely associated with hyperthyroidism; coronary disease is not uncommonly associated with hypertension.

In hyperthyroidism *emotionalism* commonly occurs; in hypertension emotionalism rarely is present in the early phase of the disease but in the malignant phase there may be emotionalism, but of a lesser intensity than is present in hyperthyroidism. In many cases of malignant hypertension there is an increase of oxidation (metabolism) but in the early phase of hypertension there is usually no increase in oxidation; in hyperthyroidism there is from the beginning an increased rate of oxidation. Whether or not the increased rate of oxidation (metabolism) in hypertension is due to a pathologic overflow from the activity of the celiac-aortic plexus and, therefore, represents a partial hyperthyroidism is a nice point.

Since, as we shall see, the entire adrenal medulla-celiac-aortic sympathetic mechanism is a complex energy-accelerator and since it is related to the only source of animal-energy—namely, oxidation; since

*This is the second annual Andrew P. Biddle Lecture delivered before the Michigan State Medical Society, at the 71st annual meeting, Detroit, September 23, 1936.

critical clinical analyses show there is a group of diseases which have their origin in a pathologic physiology of this or that sector of this complex, and since not uncommonly there are several concomitant diseases, let us consider the several parts of this complex mechanism in order to see how each part fits into the normal as well as the pathologic physiology. The principle underlying this ensemble was stated in the Ether Day Address given in 1910.

In 1924, Elliot discovered the presence of sympathin in all sympathetic nerves, the function of which is to accelerate oxidation. However, the significance of sympathin could not have been foreseen prior to the establishment of the electrical properties of protoplasm which denote the presence of electrical stimulation in normal as well as in pathologic physiology. The power of oxidation to generate electrical energy may well prove to be the missing link in accounting rationally for the pathologic physiology of the adrenal-medulla-sympathetic system.

Effect of Adrenal Denervation on Hyperthyroidism and on Hypertension

In the great majority of cases hyperthyroidism is cured by thyroidectomy, but from the experience of many clinics and certainly in our own follow-up it would appear that there are certain cases of hyperthyroidism, say, two in one hundred, that even repeated thyroidectomies can not cure. In these cases the disease is abated or cured by denervation of the adrenal glands. Likewise, that clinically analogous disease, neurocirculatory asthenia (when uncomplicated by psychoses or psychoneuroses) is abated or cured by denervation of the adrenal glands.

Hypertension is not cured by thyroidectomy, but adrenal denervation relieves the symptoms; in most cases temporarily lessens the hypertension; and in cases in young people and in early cases may give permanent relief, but this operation alone is not a specific treatment for essential hypertension. The operation must be extended to include that part of the adrenal-sympathetic mechanism which is more immediately concerned with speeding the circulation of the blood, that is, the celiac ganglia and the aortic plexus.

The Function of the Adrenal Sympathetic System

The adrenal-sympathetic system consists of two parts: one, the basic system, namely, the ganglia and sympathetic nerves in the walls of the arterial tree, and the other, an accelerating mechanism of the basic system, namely, the adrenal-medulla, celiac ganglion, celiac plexus and aortic plexus. This entire accelerating mechanism may be removed yet the basic system will continue to function. The basic system involves the innervation of the entire arterial tree, including, according to Krogh and McDowell, the capillaries. If all the capillaries in the body of a man were placed end to end, as computed by Krogh, they would extend for 150,000 miles, and since every one of the billions of cells of the liver and of many other organs is supplied with a sympathetic terminal, it follows that the entire network of sympathetic fibres in one human being, if extended, would be, let us say, long enough to encircle the earth six times, and it supplies energy to more cells than all the telephone receivers and light bulbs in all the world. Together these facts give us the master fact that the electric system of the human being is unparalleled. It is a power system, the accelerating mechanism of which, with the speed of a fulminate, changes the rate of oxidation adaptively while the celiac ganglion and the sympathetic complex flash electric stimulation into the network of the entire vascular system, thereby distributing electrical stimulation throughout the sympathetic innervation of the vast vascular system, supplying the oxygen required in crisis quantity and simultaneously sending stronger impulses over the sympathetic nerves to the liver, thus causing an increase in the output of glycogen from the liver into the speeded-up blood stream which carries oxygen. Other adaptive impulses of the sympathetic system arrest the normal activity of the gastro-intestinal tract and of the sex glands. This power station of the sympathetic system is linked indissolubly with the power station of the locomotor system, namely, the brain, which, in turn, activates the voluntary muscles, hence both the brain and the adrenal sympathetic system are adaptively stimulated by the special senses and by common sensation. Without the thyroid-adrenal-sympathetic mechanism, the brain and the voluntary muscles could do little to vary the speed of the

animal, for the brain and the muscles depend on oxidation for power. The speed of oxidation is governed by the thyroid-adrenal-sympathetic mechanism.

As the result of continued or repeated activations, pathologic physiology of this or that part of the neuro-muscular glandular system may be initiated. A pathologic physiology of the neuro-muscular mechanism produces pathologic muscle tone, as seen in contractures, tics and convulsions. Pathologic physiology of the sensoreceptor mechanism of the brain causes nervousness, psychoses, psycho-neuroses; a pathologic physiology of the sugar-mobilizing system causes diabetes; a pathologic physiology of the sector of the sympathetic system that inhibits the digestive processes may cause peptic ulcer, indigestion, spastic colitis; a pathologic physiology of the sympathetic innervation of the pituitary gland may produce a large body frame, or acromegaly; a pathologic physiology of the sympathetic innervation of the heart produces tachycardia; a pathologic physiology of the sympathetic ganglia, presiding over the arteries of the extremities, causes Raynaud's disease; a pathologic physiology of that part of the sympathetic system that supplies the thyroid gland causes hyperthyroidism; a pathologic physiology of the part of the adrenal sympathetic system that governs diastolic blood pressure, and the force of the heart beat, that is, that governs the arterial tree, causes essential hypertension.

Let us now test this theme in the light of certain characteristics of man, in contrast to other species of animals. Since man is the only animal that has gained control of energy outside his own body; since this control of energy outside of himself confers upon man competitive advantages possessed by no competing animal, man rose to higher powers in spite of his small numbers as compared with the vast hordes of great and small beasts. This was accomplished through the rising power of the brain, the thyroid, and the control of the adrenal sympathetic system. The creation and the management of the network of mechanisms requires man to be on duty with the machine which he has created, all day and all night. So we see in man a unique rise in the energy-controlling mechanisms and we find that the ratio of the weight of the energy-controlling mechanism—the brain, thyroid, and adrenal sympathetic complex—to the body

weight is greater in man than in any other animal of comparable size. Granting his size, man is the most highly developed energy mechanism.

Through his intelligence, man has so planned his schedule that he can do his work at a walk, hence the unique size of his thyroid gland, the weight of which bears a larger ratio to that of the brain than in any other animal. One would expect that this would be the case since the rôle of the thyroid gland is to set the rate of oxidation at this or that constant level while the adrenal-sympathetic system gives plodding man his flash of color in courtship, in mating, in hating, in fearing, in fighting. As a corollary, man, therefore, in the constant driving in his autocaptivity develops pathologic physiology in the only tissue that has memory, namely, in nerve tissue. In this memory tissue, man sets up, by excessive use, abnormal non-adaptive and harmful activities, that is, a pathologic physiology, peculiar only to civilized man.

We have stated that a pathologic physiology may affect that part of the adrenal-sympathetic mechanism that speeds the circulation of the blood. On what basis may we conclude that the adrenal-sympathetic mechanism, especially the celiac ganglia and the aortic complex, speeds oxidation and transmits the resultant energy directly into the walls of the entire arterial tree even to the walls of the arteries and capillaries? It was significant to find in studies of the comparative anatomy of the adrenal-sympathetic mechanism that a large and complex adrenal-sympathetic system is always accompanied by a large heart, large arteries and an intricate complex which adheres closely to the aorta.

In powerful and energetic animals such as the lion, the adrenal-sympathetic mechanism is very complex and the animal has a large and powerful heart, whereas, in a sluggish animal like the alligator, there is a simple, uncomplicated adrenal-sympathetic mechanism and the ratio of the weight of the heart to that of the animal is only 1:1192 as compared with 1:186 in the lion. As one studies the ascending scale of animal life, one finds the celiac ganglia and celiac complex growing larger and approaching the aorta until in man the celiac complex is closely adherent to the aortic wall. From this complex and from the sympathetic mechanism extend fibres which lie in the

arterial walls, even entering the walls of each arteriole and capillary. By means of this complex system the energy generated by the sympathetic complex is transmitted to every part of the arterial tree. Therefore, if a pathologic physiology of the adrenal-sympathetic mechanism is present, excessive energy is transmitted to the arterial tree with resultant contraction of the arterial walls and essential hypertension results. It must be borne in mind that the larger and more complex the system the greater the number of nerve endings, and, since it has been demonstrated that sympathin is secreted at the nerve endings, the greater the number of nerve endings the greater the amount of sympathin secreted, and hence the greater the resultant oxidation throughout the system.

It would follow, then, that by removal of the celiac ganglia and direct denervation of the aorta, the spasm resulting from the pathologic physiology of the sympathetic mechanism will be relieved and the resultant essential hypertension will be abated or cured.

We have now performed this operation

in 28 cases. The immediate result is a dramatic fall in the blood pressure which may amount to as much as 150 mm. of mercury, while the pulse rate remains practically unchanged. This immediate fall in blood pressure is followed by a temporary rise after which the blood pressure falls again until when the patient is discharged from the hospital it is well below the blood pressure on admission, the average fall being 57 mm. systolic and 30 mm. diastolic. It is still too soon to form any judgment as to the ultimate end-results, but in eleven cases in which the patients have been followed for periods varying from two weeks to four months the average blood pressure shows a fall of 44 mm. in the systolic and 25 mm. in the diastolic pressure. In every case, symptomatic relief has been experienced; headache, palpitation, nervousness, et cetera, disappearing while the patients were still in the hospital.

On the basis of such results we feel justified in continuing to employ celiectomy and denervation of the aortic plexus in the treatment of selected cases of essential hypertension, especially in the malignant phase.

ORGANIZED MEDICINE*

H. E. PERRY, M.D.†
LANSING, MICHIGAN

Over and over again, I wish to say that I greatly appreciate the honor which the Society has conferred upon me by making me its President for the coming year. Dr. Penberthy said a year ago he was following in the footsteps of a long line of distinguished gentlemen, leaders in their fields of medicine. I, too, am following that line but it is a little longer than a year ago, and so distinguished that I am filled with humility, and fear for my shortcomings. However, while working with medical organizations during the past thirty-five years, I have made many strong friends and I hope to make many more this year, and on these good friends (whom I value highly and sincerely appreciate) I am relying to help carry me through.

I want to talk, a short time this evening, on a subject which I think is very impor-

tant: Organized Medicine. Some may say "Why Organize?" This must be done for many reasons: First, to stimulate and improve members along scientific lines. Every physician in our state must keep abreast of the times scientifically in order to give the public the best medical service possible. The physician who attends no post-graduate courses, and buys no new books, soon finds himself high and dry on the banks as the stream of knowledge, new discoveries, new methods of doing things rush on, to be absorbed by the more progressive members of our profession. It is gratifying to us older members of the profession in organized

*Address of President-Elect delivered before the Michigan State Medical Society on President's Night, September 23, 1936, Detroit.

†Dr. Perry is president of the Michigan State Medical Society. He was graduated from the Michigan College of Medicine and Surgery in Detroit in 1897, and also was graduated from the Northwestern University, Chicago, with the class of 1904. Following 1904, he spent six months as interne at the Battle Creek Sanatorium. He entered private practice at Newberry, Michigan, as a partner of Dr. Frank P. Bohn, a partnership which lasted twenty-five years. Dr. Perry was elected to the Michigan State Legislature in November, 1932, and served through the years 1933-1934. He was a candidate for the legislature in 1936. He is in private practice at Newberry, Michigan, at the present time.

medicine to note the large number of busy doctors who avail themselves of post-graduate study each year. The public should know this, as the doctors are doing it for them. Good doctors throughout our land realize the responsibilities which rest on them in dealing with the health and lives of our people.

Order

Order is God's first law. To have order, we must have organization. A hit and miss system is not conducive to order. The physician's Guild (symbol of order) is his medical society. It is the only organization which holds his interests paramount, and therefore the interests of the public he serves. Allegiance to the medical society on the part of the physician is merely allegiance to himself and to his ideas and ideals.

Greater unity and more interest and enthusiasm by the individual practitioner of medicine in his county and state medical society, in organized medical activities and efforts is recommended. The county society can no longer be looked upon as a scientific debating club. Modern vicissitudes call for modern treatment. The members of our medical societies must look at the actual real problems of our present day existence and solve them in a practical, modern way.

Medical Economics

The social aspects of sickness (medical economics) must be faced squarely by medical men. The doctor who insists that his county medical society must be 100 per cent scientific is not true to himself, his family, or his colleagues. He is an ostrich with his neck deep in the sand. If the social aspects of sickness represent forty or fifty or sixty per cent of the doctors' problems of practice, then, that very same percentage of our medical society's attention should be accorded to said important subject. I assure you that the social workers and other groups interested in the distribution of medical service are far more interested in the social aspects than the medical man himself, around whom the whole service pivots and without whom medical service would not exist to be so freely "distributed."

Organize for order. Build up your county medical societies. Strengthen our State Society. Develop the district. Encourage the regional meetings of two or more Councilor Districts. To insure the permanence of the

regional group which has proven to be so very successful in neighboring states, the election of a president and secretary for a term of three years in each region is recommended. The Michigan State Medical Society will assist in all ways possible towards the development of live regional groups, I feel sure.

Medical care is a service. It has an economic value the same as any other commodity has value. The vendor of medical care is just as much entitled to remuneration for his services as the vendor of food, fuel, clothing and housing. This is a plank in our platform which every man and woman in our state must know, realize, and remember.

Preventive Medicine

Let us be modern! With curative medicine being more and more circumscribed as diseases are eradicated by new discoveries, Preventive Medicine offers a large field of possibilities. The progressive physician is taking advantage of this recent advance in medical procedure. The public has already received training regarding its benefits and wants preventive medicine. It represents an opportunity of service second to none in the field of science and art.

Social Security and Health Insurance

The implications of the social security law in Michigan probably mean a change in our welfare laws. If we can take the experience of neighboring states, we can expect, in Michigan, next January, February, March or April that this change in laws may represent an opportunity to irregular and back-door practitioners to try and chisel into the domain of the crippled child, the afflicted child, and the dependent child, and seek privileges equal to those of the medical doctor, without the necessity of slaving years to gain the knowledge and experience fitting him to care for these poor and suffering people. This would indeed be serious, as the health of the public is too precious to gamble with.

The visionary talk of health insurance should be substituted by a more practical and very necessary talk of job assurance. Give every worker a job and enough wage to pay his bills and more. Then, the problem of distribution of medical care will not exist. Government (of all types) should stay out of the practice of medicine for the good of

the public and medical progress. Leave medical practice to medical doctors who are fitted for the job by training, experience and legal qualifications.

Sound Principles of Medical Practice

Doctors, hold fast to the principles that have been tested and proven dependable throughout the years of medical practice and progress. Fight crusadingly and unabatingly against the wild experiments of

fanciful and inexperienced dreamers who would change all, just for the sake of change, despite direful consequences to our people.

With us, the people come first and their health interests are commandments for the medical profession. This has been true since the day of Hippocrates and can never be changed, so long as doctors of medicine hold steadfast to their principles of order, ethics and endless education.

ALLERGIC SHOCK

MERLE PIERSON, M.D.†

DETROIT, MICHIGAN

The frequency of severe reactions following such usually innocuous procedures as skin testing by the scratch method, the injection of diphtheria toxoid, or the taking of certain drugs as antipyrine, is not generally appreciated. Dr. Waldbott, however, in recent articles^{3,4,5,6} has reported a series of such reactions. To these I wish to add brief summaries of six cases seen in private practice.

Case Reports

Case 1.—C. M. was first seen January 26, 1932, at the age of two and a half months because of a generalized dry eczema. His mother had had eczema as a child and now has hay fever. His father's cousins are allergic. On June 7, 1932, immediately following the ingestion of a small amount of raw egg white, he vomited forcibly through his nose and then developed a generalized giant urticaria with edema of the eyelids. The remainder of his first year was characterized by numerous attacks of rhinitis and bronchitis. March 18, 1935, a large wheal followed the application of powdered egg white to a small scratch on the back. The next day his face was badly swollen, and he had a temperature of 102 with wheezing and dyspnea.

Case 2.—This child developed like the first a generalized delayed reaction following a scratch test but no immediate skin reaction. His allergic manifestations have always been confined to the respiratory tract which may account for his lack of dermal response. Clinical sensitizations to timothy and ragweed with negative skin tests^{1,6} have been reported previously.

G. S., a member of an allergic family, was first examined June 21, 1932, at the age of three years because of a history of frequent attacks of asthma and pneumonia (allergic?). At times, he would become white and collapse. A roentgenogram taken December 15, 1934, showed a pan-sinusitis but no chest pathology. Specifically, there was no enlargement of the thymus.

July 11, 1935, he had been coughing for three weeks but this temperature was normal. He showed, however, certain prodromes which led his mother to expect the onset of severe respiratory symptoms; he slumped, his abdomen protruded, he looked tired, and his face had a bluish cast. Although a previous scratch test for sensitization to timothy had been negative, he was again tested and with the same

result, July 12, he was limp, cyanotic, his lips cherry red, his breathing rapid, his temperature 103.² Epinephrine controlled his symptoms so that in twenty-four hours his temperature was normal and his cough improved.

The sequence of events in this case is such that one suspects the absorption of allergen from the scratch as the precipitating factor although it is impossible to prove that the symptoms would not have developed regardless of the test.

Allergic Reactions to Injection of Diphtheria Toxoid

Case 3.—J. M., sixteen months old, with a previous history of eczema, was given on January 26, 1935, a first injection of 1 c.c. of alum precipitated diphtheria toxoid subcutaneously. January 28, he had a rhinitis and on January 29 hoarseness and croupy cough with a temperature of 104. On examination, few breath sounds were heard and the chest wall seemed fixed in inspiration. That the toxoid was responsible for the reaction is indicated by a second case where two days after the injection of 0.5 c.c. of diphtheria toxoid (not alum precipitated) an eight months old girl had an attack of croupy cough and hoarseness with elevation of temperature to 103. She has since developed an eczema.

That my two experiences with delayed allergic manifestations in the respiratory tract following the injection of diphtheria toxoid are not isolated, is indicated by a query in the *Journal of the American Medical Association* for January 5, 1935, where a case of acute respiratory disorder with fever and generalized urticarial rash following five days after the injection of diphtheria toxoid is cited.

Severe Allergic Reactions to Drugs

Case 5.—This case is interesting because of the reaction following the absorption of a drug, prob-

†Dr. Pierson was graduated from the University of Michigan, M.D., 1922. He is a Licentiate of the American Board of Pediatrics, also Senior Attending Physician on the Pediatrics Service, Woman's Hospital, Detroit.

ably antipyrine, from the gastro-intestinal tract. K. F., previously seen because of a spasmodic cough and wheezing, when one year old was given a prescription containing sodium bromide three grains, tincture of belladonna one minim, and antipyrine three-fourths of a grain to the dram. She had never had any of the drugs previously, although her mother showed drug sensitivity while in the hospital at the time of her confinement. Twenty minutes after taking one teaspoonful of the mixture the baby collapsed, at the same time breaking out with a generalized urticaria. Her voice was hoarse. The reaction was controlled with epinephrine.

Case 6.—C. P., an adopted child, at the age of twenty months, swallowed an unknown amount of tartar emetic. To induce vomiting he was given two teaspoonfuls of dry mustard in a glass of water. It was noted that this solution caused his lips to swell. In a few minutes he broke out with a generalized urticaria and an edema of the scrotum, and then became unconscious. After a hypodermic injection of epinephrine and washing of his stomach with 0.5 per cent tannic acid solution, he recovered. He had a history of generalized eczema.

Conclusion

The necessity for caution in any procedure—scratch testing, the injection of diph-

theria toxoid, the giving of prescriptions containing such drugs as ipecac, antipyrine, amidopyrine, phenolphthalein, or the employment of home remedies as mustard by mouth or in a plaster—in an allergic child should be emphasized. None of these should be undertaken without a knowledge of the family allergic background and the child's previous history. Especially should one be careful in scratch or intradermal tests with such atopens as egg, cotton seed or Kapok seed, buckwheat, horse-dander, fish glue, and mustard.

Bibliography

1. Peshkin, M. Murray and Fineman, A. H.: Asthma in children. *Am. J. Dis. Child.*, 34:815, (Nov.) 1927.
2. Taussig, Albert: Cutaneous allergy following the ingestion of amidopyrine. *J. Allergy*, 6:291, (Mar.) 1935.
3. Waldbott, G. L.: Allergic death. *Arch. Int. Med.*, 54:597, (Oct.) 1934.
4. Waldbott, G. L.: Allergic shock from substances other than pollen and serum. *Ann. Int. Med.*, 7:1308, (April) 1934.
5. Waldbott, G. L., and Anthony, G. E.: So-called thymic hyperplasia. *Am. J. Dis. Child.*, 47:34, (Jan.) 1934.
6. Waldbott, G. L.: The allergic theory of so-called thymic death. *J. A. M. A.*, 105:657, (Aug. 31) 1935.

"PUS TUBES" DISCOVERED AFTER OPENING THE ABDOMEN: THE PROBLEM, SOME STATISTICS

SHATTUCK W. HARTWELL, M.D.†
MUSKEGON, MICHIGAN

Every surgeon sooner or later is faced with the problem of what to do with acutely inflamed "pus tubes" discovered after the abdomen has already been invaded because some other preoperative diagnosis, usually acute appendicitis, gave adequate indication for surgical intervention. Such inflamed tubes may cause all the symptoms leading to the preoperative diagnosis and thereby constitute the only pathological condition. More frequently the preoperative diagnosis is found to be correct, the tubal infection occurring as an asymptomatic or masked, co-existent lesion. These findings may appear even after an honest effort on the part of the surgeon to rule out salpingitis before establishing his preoperative diagnosis. Whether the tubal condition is a primary acute infection, or an acute exacerbation of a chronic tubal infection, the decision as to procedure is one of nice surgical judgment and must necessarily be made at once. The need for this decision arises so infrequently in the work of any one surgeon that judgment based upon the known end-results of a large series of cases is not possible. Statistical studies of such

cases are almost non-existent. The only other available bases for judgment are: (a) the surgeon's personal knowledge of the results of early or delayed operation for acute salpingitis so diagnosed preoperatively (a different problem); (b) his fear of legal action for performing an operation in addition to that for which permission was obtained; (c) the associated pathologic changes present and the degree of peritoneal traumatization created in correcting them; (d) the degree and localization of the pelvic infection; (e) certain philosophical biases, such as the matter of the preservation of tubal function (a moot question); the comparison of the acutely inflamed tube to an acutely inflamed appendix (not comparable anatom-

†Dr. Hartwell was graduated from the University of Minnesota, B.S., 1923; M.B., 1925; M.D., 1926, after internship at Highland General Hospital, Rochester, N. Y. He was a Fellow in Surgery at the Mayo Clinic, 1926 to 1930, and received his M.S. degree in Surgery, in 1929, and Ph.D. in Surgery, in 1930, from the graduate school of the University of Minnesota. He has been in private practice at Muskegon since 1930, specializing in diagnosis and surgery. He is Consultant in Surgery at Hackley Hospital.

ically or surgically because of differences in blood and lymph supplies and peritoneal resistance); the socio-economic status of the patient; the surgeon's impression of what is usually done in similar cases.

Because end-results constitute the only satisfactory basis of criticism for or against any surgical procedure, and because the customary local procedure may be important legally, it was felt that a statistical study of such cases would help to change "impression" to "knowledge"—a much surer basis for good judgment. The following tabulation defines, clearly, the customary practice in a community of 70,000, and presents a brief analysis of end-results. It is not published as an argument for or against the extirpation of pus tubes.

Such a study affords no measure or comparison of secondary morbidity, sterility or socio-economic advantage or disadvantage resulting from salpingectomy. These factors which so largely influence our judgments must be clarified by other studies more sociological than surgical.

At Hackley Hospital, Muskegon, Michigan, in the 10-year period from January 1, 1923, to December 31, 1932, there were 730 women between the ages of fifteen and forty-five who had appendectomy or salpingectomy performed, either alone, together, or in association with other abdominal surgery. Of those cases, 176 had salpingectomy performed with or without appendectomy.

The 176 women in the child-bearing age, on whom salpingectomy was performed, have been classified according to the pre-operative diagnosis as shown on their hospital records. They have been further broken down into groups according to their post-operative diagnoses as shown by the hospital records. A complete tabulation of ages of patients, their marital status, surgeon and assistant in each case, surgical procedures, type and degree of pathologic change recorded, convalescent period in hospital, and results at time of dismissal from the hospital, has been made. The entire tabulation has been reduced to various groups and pertinent totals. Twenty-six cases were diagnosed appendicitis with no other diagnosis before operation, yet salpingitis was present. Of these, on surgical exploration, ten showed acute salpingitis only, ten showed acute salpingitis plus appendicitis or peri-appendicitis, and six showed chronic

salpingitis plus appendicitis of some type.

The cases which are pertinent to the determination of the customary local procedure in a case diagnosed pre-operatively as appendicitis and operated upon for that reason alone, and in which acute salpingitis was discovered at operation, fall into two groups: (1) Those in which there was no appendicitis present; (2) those in which some degree of appendicitis was found in conjunction with the salpingitis.

There are ten cases in each group.

Separately these groups show the following facts:

Group 1.—Preoperative diagnosis appendicitis only—postoperative diagnosis acute salpingitis only (no appendicitis).—Ten cases—four of them under the age of twenty, and four of them single women. In the first place, sixteen physicians saw fit to remove the appendix in nine out of these ten cases, although no evidence of actual appendicitis was recorded in any of their records. In the second place, salpingectomy was performed by these doctors in every individual case—in three bilateral, and in seven, unilateral salpingectomy. Of these cases only four showed bilateral salpingitis present. Only one out of ten patients was returned from surgery with an acutely inflamed tube left in place. All of these patients made good recoveries. The average stay in the hospital was fifteen days. One seventeen-year-old girl, in whom one tube had been left, was re-operated and the tube removed—while acute inflamed—six weeks later.

Group 2.—Preoperative diagnosis appendicitis only—postoperative diagnosis acute salpingitis plus appendicitis or peri-appendicitis.

In the first place, eight Muskegon physicians saw fit to remove the appendix in every one of the ten cases. In the second place, salpingectomy was done in nine of the cases—in four, bilateral, and in five, unilateral. Of these cases only four showed bilateral acute salpingitis. The ages of the bilateral cases were forty-three, twenty-two, fifteen, and twenty-four years. In each of these women, although three of them were under age twenty-five and two of them were single, bilateral salpingectomy was performed, as well as appendectomy. There were three cases in which the surgeon failed to record whether tubal involvement was unilateral or bilateral. In one of these, a

single girl of sixteen, appendectomy alone was done. Only one of ten such cases was returned from surgery without salpingectomy. This patient stayed in the hospital nineteen days, whereas the average postoperative period of hospital residence, for the entire group, was 15.4 days.

In this group of twenty-six cases, diagnosed appendicitis preoperatively in which the postoperative diagnosis was salpingitis with or without appendicitis, the youngest girl was fifteen and the oldest woman was forty-four. The average age was twenty-six years. The surgeons involved in this group, whether as surgeon or assistant, represent twenty-four members of the medical profession in Muskegon. In the entire group of twenty-six cases diagnosed appendicitis only, yet showing salpingitis, nine were single women. Nine cases showed bilateral salpingitis, and in eight cases bilateral salpingectomy was performed. Seventeen cases showed unilateral salpingitis or the surgeon failed to state, on his record, whether the infection was unilateral or bilateral. In this group of seventeen cases, fifteen unilateral salpingectomies were performed. In the entire group, appendectomy was done at the time of salpingectomy in twenty-four of the twenty-six cases. Every patient left the hospital alive and with a

good result. The average length of stay in the hospital was 14.8 days. One girl of seventeen, in whom the preoperative diagnosis had been acute appendicitis and in whom the surgeon found unilateral right-sided acute salpingitis only, and from whom the surgeon removed the right tube and appendix leaving the left tube intact, was reoperated six weeks later for removal of an acute left salpingitis. (While this case represents bilateral salpingectomy with appendectomy in a seventeen-year-old girl for acute salpingitis, it has been included in the tabulation under unilateral salpingectomy with appendectomy as that was the procedure at the time of the diagnosis of appendicitis.)

From these hospital records it is definitely established that it is the accepted procedure in this community to remove acutely inflamed uterine tubes when they are unexpectedly found at laparotomy. It is further established that appendectomy at the same time is also the accepted practice. Furthermore, in the ten-year period of this study no woman died as the result of this type of procedure. The longest postoperative hospital stay was twenty-two days, while the average stay for these cases of acute salpingitis treated surgically was 15.2 days.

WHEN SHALL A PATIENT BE DISCHARGED FROM A TUBERCULOSIS SANATORIUM? SOME CRITERIA

EDWARD KUPKA, M.D.†

OAKLAND SANATORIUM, PONTIAC, MICHIGAN

When a patient has been admitted for treatment to a Tuberculosis Sanatorium, the diagnosis has usually been reached elsewhere. Signs, symptoms, characteristic x-ray findings, positive laboratory tests, alone or in combination, are present. Dietetic-hygienic-bed-rest treatment is commenced, with or without collapse therapy, and the average patient begins a slow improvement. As the healing process gains the upper hand over the disease, the various signs, symptoms, etc., disappear, and this return to normal is our gauge to the recovery of the patient.

At some point in the favorably progressing case, we must ask ourselves whether the patient can return to his usual life and occupation. In making this important decision, we make use of certain criteria. This article will be an attempt to evaluate

these criteria and set up somewhat arbitrary standards as sign posts to direct our judgment.

At the outset, a repetition of a trite aphorism will not be out of place. Intelligent medical management does not tolerate the blind application of generalizations to the solution of any rehabilitation problem. Every patient must be studied as an individual, almost as a unique, case. It will be

†Dr. Edward Kupka was graduated from Wayne University Medical College, 1928, M.D., having served his internship at Providence Hospital, Detroit. He went into private practice in Detroit and was Resident in Medicine, University Hospital, Ann Arbor, 1934. He is now staff physician of Oakland Sanatorium, Pontiac.

evident in the grouping of the criteria that the problem can be approached from many angles. A satisfactory state of affairs from the x-ray standpoint may be neutralized by a bad clinical course; or a patient doing well in every other way may still have a positive sputum. While the categories differ, obviously, in their relative importance, final decision is best reached by a balancing of all the factors in the problem.

The question of cure or arrest of a pulmonary lesion rests not as much on evidence of its presence as on evidence of its activity. An old, chronic fibroid tuberculosis, while giving evidence of its presence by, let us say, dyspnea, dullness on percussion and deviated trachea, may still be a quite inactive lesion and require no further treatment. Most healed pulmonary tuberculosis leaves behind evidence, usually gross, rarely only microscopic, of the former pathologic process. As with a long-silent volcano, eruption may recur, although evidence for the time being justifies its classification as quiescent or arrested.

Ordinarily, a patient is kept at bed rest until there is reasonable assurance of inactivity of the lesion. Then the gradual process of getting up is commenced and the patient allowed periodically increasing "privileges." There is considerable difference of opinion concerning the manner of letting the patient up. Some physicians allow privileges early in the treatment. Some keep the patient at strict bed rest until late or until shortly before discharge, then letting the patient up quickly. A middle course may be best but the initial period of bed rest should be continued until most of the criteria are met. When considerable bodily movement has been allowed and the patient continues to do well, the case is viewed for discharge. At this time all or most of the important indications must be met.

Reviewing the case in preparation for discharge is a study in negatives. We expect the signs and symptoms by which the patient was originally diagnosed to have disappeared or returned to normal. In addition, any evidence of activity which developed during treatment, such as pleural effusion, must also have disappeared. Ideally, the patient should leave the sanatorium in perfect health. We try to approach that ideal, difficult as it is even theoretically.

When critical analysis is turned upon the

patient's status quo the relevant facts group themselves naturally, as follows:

- | | |
|----------------------------|------------------------|
| 1. Constitutional symptoms | 5. X-ray findings |
| 2. Pulmonary symptoms | 6. Complications |
| 3. Physical signs | 7. Type of collapse |
| 4. Laboratory procedures | 8. Non-medical factors |

Constitutional Symptoms

These, due to the toxic effect of the tubercle bacilli upon the body as a whole, are usually the first evidence of the disease to make their appearance. To their gradual development, phthisis owes its reputation of insidiousness. Experience shows that they, likewise, are the first to disappear under treatment. Even sorely stricken patients will show this type of symptomatic improvement upon bed rest alone (and too often relapse when bed rest is discontinued prematurely).

Fever.—The high normal is dependent upon the observer's habit, but readings above 99.2° (or 99.6°, premenstrual) can be evidence of activity. The course being otherwise favorable, the temperature should have been normal for at least three months before the patient is allowed to be up.

Pulse.—In the absence of other causes for an increased pulse rate the standard of 90 at bed rest and 100 on moderate activity (walking) should not be exceeded. Hyperthyroidism and cardiac neurosis are the most frequent co-existing causes. Some believe that long continued bed rest, with resulting atonicity, induces moderate tachycardia. Ordinarily, in the course of treatment the pulse should quickly subside to normal and, as with fever, should be within average limits for three months before the granting of privileges.

Night sweats, provided they are genuine, are found, usually, in far advanced and very sick individuals and can never be present in a candidate for discharge. However, some patients perspire easily, and will report night sweats when only the warm night or too many covers are responsible; therefore, care must be used in evaluating the report.

The famous trio: *loss of weight, loss of strength and loss of appetite*, usually improve or become worse together. Reasonable judgment dictates that the candidate for discharge hold his weight upon privileges, or at least not present a continuous, even though gradual loss, and that strength remain unchanged or improved. Of anorexia, which Lawrason Brown considers

a gloomy prognostic sign if severe and continuous, one can simply state that it should not be present. If the weight remains unchanged, even though the appetite is only fair, there is no contraindication. After patients have been on bed rest long, especially women who have gained much weight, there is a tendency to cut down voluntarily on food consumption—an almost instinctive reaction. And, as will be mentioned later in connection with intestinal tuberculosis, the gastro-intestinal tract can become very temperamental in an individual confined to bed.

Pulmonary Symptoms

Hemoptysis.—One of the most pathognomic symptoms, while valuable in diagnosis, is used here only as a contraindication. It invariably means activity of the lesion, and at least three months should have passed subsequent to a hemorrhage before any exercise is permitted, and six months before discharge can be considered—other factors favorable.

Cough, on the other hand, is a non-specific symptom. In diagnosis it does no more than call attention to the respiratory tract. It may persist though tuberculosis is no longer active, due to bronchiectatic enlargement of bronchioles secondary to a distorting fibrosis, to a non-tuberculous bronchitis, to diaphragmatic adhesions, or merely habit. While its absence is ideal its presence does not contraindicate discharge, unless the cough is very severe.

Sputum: Disappearance of sputum has long been considered a prime indication of healing. But not rarely sputum, in small amounts, and Koch-negative, will persist when all other evidence points to an arrest of the disease. Often chronic upper respiratory disease, with pharyngeal back-drop, will lead the patient to believe that he produces sputum.

Pain in the chest is so non-specific that it cannot serve as a criterion, except as part of a syndrome which proves pleuritic effusion. Commonly intercostal neuralgia or referred pain from healed pleural symphysis will be the cause, and this symptom is also one of the most frequently encountered complaints of the phthisiophobe or insurance malingerer—for opposite reasons.

Dyspnea can be interpreted only as part of the picture. In spontaneous pneumothorax it lends a strong suspicion of activity.

With an old healed tuberculosis, it means merely lower pulmonary ventilation. Its greatest importance to a patient otherwise ready for discharge is that it constitutes an additional handicap and limits the type of work in which he or she may engage.

Physical Signs

Of the confusing welter of abnormal physical findings in pulmonary tuberculosis, developed by and since Laennec, many are now found to be of such slight importance or so misleading that they are no longer depended upon. The x-ray has in large part rendered unnecessary the former dependence upon pulmonary examination by inspection, palpation, percussion and auscultation. For our present purpose, nevertheless, two signs remain of value.

Râles.—The finding of medium course râles in the upper chest remains almost pathognomonic of pulmonary tuberculosis. Their presence, however, does not prove an active lesion. Occasionally a physician is able to elicit râles in a case cured beyond doubt for many years. Whatever the mechanism of their production, we ask of râles that are present in a case otherwise ready for discharge: that they remain unchanged in character and in size of area of skin over which they are heard.

Flatness.—As this sign usually indicates more than minimal amounts of fluid, it should contraindicate discharge, since persisting gross fluid is commonly accepted as an indication of activity. In the presence of artificial pneumo-thorax, small amounts of fluid are commonly found, but here, too, an amount large enough to be recognized by physical examination, calls for further treatment.

Laboratory Procedures

Red Blood Count and Hemoglobin.—Secondary anemia is commonly present in phthisis. With healing it improves and the red blood cells and hemoglobin return to normal. If the anemia persists, causes other than tuberculosis should be sought for.

White Blood Count, Differential and Sedimentation Rate.—The chief objection to the employment of these criteria is their non-specificity. Much has been written concerning the value of the sedimentation rate, particularly as a gauge to activity of the tuberculous process. The beautiful work of Medlar and others inclines one to lean heav-

ily upon these blood changes. But practically, if there are no concomitant indications of activity even in the absence of other possible causes, and above-normal sedimentation rate, a leukocytosis of mild degree, or a depressed lymphocyte count, alone or together, do not contraindicate discharge. As corroborative evidence to add to other equivocal signs these, however, may be valuable.

Positive Sputum.—Finding of tubercle bacilli in the sputum is an unailing guage of activity and the sheet anchor of our criteria. The broad generalization can be made that no patient with a positive sputum should be discharged from the sanatorium. Cases of ancient fibroid tuberculosis doing well for years and yet spilling bacilli can be brought to mind but they constitute the exception that proves the rule. The reasons for refusing discharge to a bacillus-expectorating patient are two. First, regardless of his status quo, the Gaffke count is evidence of "the sword suspended by a hair," as there is ever present opportunity for bronchogenic spread into the same or opposite lung, and of laryngeal and intestinal tuberculosis. Second, from the public health standpoint, the patient represents a menace to all who come in contact with him on the outside, and ideally should continue to be isolated.

X-ray Findings

Now we deal with the greatest single agency in judging the progress of a case of tuberculosis. Every so often someone will state that he is ready to throw overboard all physical examination and depend on the x-ray instead. While there is no justification for abandoning any type of investigation that promises to give additional information about the patient's condition, it is true that the x-ray gives us far more information than physical examination. Though looming large it yet remains only part of the picture, and all other criteria mentioned in this article must be evaluated to fill in the rest. For our purposes in judging readiness for discharge, we ask that the x-ray disclose particularly three facts, or rather, in a negative way, that it demonstrates absence of three phenomena.

Cavity.—The presence of discernible cavity is, like hemoptysis and positive sputum, prima facie evidence of activity of a lesion, and contraindicates discharge. As mention-

ed in the discussion of positive sputum, there are rare old cases doing well who have demonstrable cavity but these are better museum pieces than guides for conduct. Probably every large cure-center has one enfant terrible who has a large excavation and yet lives on comfortably and even works. For our purpose, a patient with cavity does not even come up for discussion for discharge and not even for privileges, but rather for additional collapse therapy. If there is doubt as to whether a particular rarefaction represents cavity or not, it should be considered as cavity unless all other evidence inclines toward inactivity of the lesion.

Exudative Lesion.—An exudative lesion is always an active lesion and when there is doubt as to whether the x-ray picture has exudative components, it is safer to consider the disease active. It is accepted that adult tuberculosis in its earliest manifestations, or while invading new areas, is invariably exudative in character. Thus, fibrosed or resorbed lesions are the only ones considered for discharge.

Changing Lesions.—While common sense dictates that a lesion which changes by increasing its extent is active, it is not as commonly accepted that a lesion growing smaller is also active, even though all other signs are favorable, and the x-ray appearance is that of an apparently well healed fibrosis. These unstable types, as sad experience teaches, are ever prone to relapse. Change in either direction indicates activity and so we ask that the last two films, at three month intervals or the last three at two month intervals, show no change.

Complications

Tuberculosis is a protean disease and can strike any bodily system. Tuberculous enteritis and tuberculous laryngitis, dependent as they are on a tubercle-producing pulmonary lesion, are evidences of continuing activity, thus contraindicating discharge, even when the lungs seem to be doing well. Tuberculous pneumonia, miliary tuberculosis and tuberculous meningitis indicate an overwhelming acute extension of disease. Pleurisy with effusion of any appreciable extent and tuberculous empyema call for additional treatment. On the other hand, skin, eye, bone and joint, and genito-urinary tuberculosis can be present with a well-controlled pulmonary lesion, and under that circumstance can be discharged from a sanatorium

for outside treatment at the hands of the respective specialists.

Type of Collapse

During this era, the heyday of collapse therapy, it is felt that the various surgical procedures that bring local rest to the lung not only facilitate healing but reduce the probability of recurrence. Since pulmonary tuberculosis is notorious for its tendency to relapse, it seems much safer if the discharged patient carries with him some form of collapse therapy to help tide him over the critical year or two after discharge, during which period most relapses occur. Today at many sanatoria most cases of more than minimal extent enjoy the benefits of "pneumo" or "phrenic." Patients who have been on the dietetic-hygienic régime alone should be kept under treatment longer. Those with a temporary phrenic interruption should be discharged with a string attached, so that they can be kept under observation, especially at the time when the nerve is recovering its function. Unilateral artificial pneumothorax has the advantage not only of keeping up a collapse as long as it is deemed necessary, but also brings the patient back to the physician at regular frequent intervals, not only for refill but also for check-up. Bilateral pneumothorax cases present a tricky problem and are often so unstable that if they cannot be kept in a sanatorium until they have shown enough improvement to allow one lung to re-expand, rigid control must be maintained on the outside. Thorocoplasties should be kept in the sanatorium six months, and better nine, after the last stage of their operation; with them the rehabilitation problem must be handled most gingerly, since, the "last word" having been pronounced, there is usually nothing else left to do if they flare up.

Non-medical Factors

When we have satisfied ourselves as to inactivity of a pulmonary tuberculosis by complying with the above requirements, there still remains a set of problems to solve before the patient can be sent home. These have to do with his personality, education, economic and social status and the type of work he is to engage in. This represents a non-medical angle but is of considerable importance, and many a patient has achieved a satisfactory arrest to relapse shortly be-

cause he, or his environment, were not adjusted.

Personality.—Tuberculosis curers tend to accentuate the personality traits they possess before admission. Thus, the phlegmatic will be more calm, the nervous, more upset. There is no doubt that the inability of some patients to adjust themselves to a long period of bed rest acts as a deterrent to cure. The worrier, who finds it impossible to rest quietly, often does attain quiescence and arrest nevertheless. However, it is wise to keep him in the sanatorium longer and to grant privileges more slowly. Contrariwise, the excellent cure-taker, who seems a good risk so far as his behavior outside the sanatorium is concerned, may be discharged at a much earlier date, other factors equal.

Education.—By this is meant, not the academic equipment with which a patient comes to the sanatorium, but the education concerning his disease which the patient acquires during his period of residence. Trudeau well knew the educational aspects of a period of institutional régime and to this day the famous Adirondack center bearing his name makes systematic efforts to teach the patient about tuberculosis. Patients are almost pathetically eager to acquire knowledge about this, their worst enemy, and the sanatorium doctor is remiss who does not, by patient explanation, teach his wards how to respect, and not fear, their disease. Thus the average patient who has "coöperated" is readier for discharge than the rarer one, whose lack of native intelligence, stubbornness or phthisiophobia have made him a poor "scholar." The advisability of frequent check-up, of the recognition of early symptoms of relapse, of the necessity of a continuing rest-régime must be impressed upon him. The best type of patient should acquire a grasp of his disease similar to that of the intelligent diabetic.

Economic and Social Status and Type of Occupation are interwoven. To the well-to-do of secured income, the cure or continuing partial cure may be extended indefinitely in an excellent environment, and ultimately some very easy form of activity may be engaged in, profitably or otherwise. When the home is adequate the patient may be kept in a sanatorium only long enough until the acute phase is past, collapse therapy has been instituted, and the lessons of sanatorium residence have been learned. But these are the exceptions. Most patients have to

work and the same environmental conditions that made the patient a victim of tuberculosis become operative when the sanatorium doors close upon him. While phthisis no longer fits the definition of "chronic, progressive, relapsing, incurable disease," it retains the characteristics of chronicity and especially of relapse.

Therefore the patient with an unfavorable milieu to return to is not only given the type of collapse therapy which will continue to give him local rest, but he is kept in the sanatorium as long as circumstances permit. A poor un-hygienic home, the prospect of having to return to an unsuitable type of labor, an un-comprehending family, are all factors which retard the discharge date. Thus do the medical criteria for discharge become mixed with sociological and economic factors.

The field of rehabilitation for tuberculars is beginning to be tilled by governmental agencies and its present unsatisfactory state will be improved as time goes on. In the meanwhile, we must interpret our categories conservatively with those who can-

not go into a favorable environment when they leave us.

Conclusions

1. Any patient who is a candidate for discharge from a tuberculosis sanatorium should be individualized and regarded from many angles, the factors involved grouping themselves naturally into such categories as signs, symptoms, x-rays, et cetera.

2. The ideal of total inactivity of the lesion should be approached as closely as possible; particularly the sputum must be negative, the x-ray findings those of a healed lesion, and the collapse therapy adequate.

3. The social-economic and personality factors must be considered along with the more strictly medical indications.

4. Education and rehabilitation are necessary correlaries to the treatment of tuberculosis.

Summary

An attempt has been made to analyze and group the factors available in making the decision to discharge a tuberculous patient, and in a slight way to standardize these criteria.

PELLAGRA

I. W. BROWN, A.B., M.D.†

Director of the Department of Public Health and Welfare

KALAMAZOO, MICHIGAN

Occasionally there come to the City Physician's office in the Health Department men with an eruption limited to the backs of the hands and fingers. These cases have been called here "alcoholic hands" because the men always give a history of prolonged "bouts" of drinking denatured alcohol; sometimes months of continuous drinking. The first case in my experience came to my attention about July 16, 1936. An interest was aroused because of the very limited distribution of the eruption. I assumed that the condition was associated with the denaturing agents used in the alcohol. A perusal of the pharmacology of many of these substances gave me no light as to the nature of the lesions. An inquiry at the Dermatology Department of the University of Michigan plus a reading of the literature disclosed that the condition is Pellagra.

Case 1.—E. E., aged fifty-four, male, white, presented himself at the City Physician's office complaining of an eruption on the backs of both hands. Examination showed a subacute erythematous, scaly, dry, eruption of an eczematous appearance limited

solely to the backs of the hands and fingers. The line of demarkation at the back of the wrists and along the medial and lateral sides of the hands and fingers was sharp. There were no vesicles or bullæ and no "weeping." There was no pruritus or pain but only a mild burning sensation. The patient was a "bum" from the "jungles" and gave a history of having drunk a quart of a mixture of equal parts of denatured alcohol and water each day since early in March, a period of over four months. He had eaten irregularly during this time and had lost considerable weight. There were no other symptoms such as diarrhea or sore mouth although he did say that others who had a similar condition living down in the jungles do complain of both these symptoms and at times very severely. Instructions were given to the patient to stop drinking and a bland ointment was applied. In about a week the area had completely desquamated and was accompanied by a moderate amount of weeping. The area had the appearance of a healing burned area. In another

†Dr. I. W. Brown is a graduate of Albion College, A.B., 1920; University of Michigan Medical School, 1925. He practiced general medicine and surgery, Kalamazoo, Michigan, until February, 1936. Since then he has been Director of Public Health and Welfare, Kalamazoo, Michigan, and Instructor in Pathology, Burgess Hospital, Kalamazoo.

week the area was entirely healed except a small area on one finger. The surface of the healed portion had a dusky appearance and in still another week the healing was complete but with the pigmentation of the involved area noticeable. There was no dementia (unless an individual who drinks quantities of denatured alcohol could be considered demented).

I found on investigation that for the past several years these men have periodically appeared at the city physician's office with this condition and in some cases more than once. In all cases they have been "jungle bums." Always men, always have been on a long bout of drinking dilute, denatured alcohol and the lesions have always been limited to the backs of the hands and fingers. So far as I know these men have never been asked concerning the other symptoms of pellagra, principally mouth lesions and diarrhea, because the nature of the condition was unknown. The assumption being as was my own that the condition was associated with the denaturing agents in the alcohol.

There is a clear discussion of the condition in the *Journal of the American Medical Association* February 4, 1928, and in several numbers of the Archives

of Dermatology and Syphilis for 1928-1930 there is reference made.

Pellagra is generally considered a deficiency disease and in regions where it is endemic is associated with a very limited diet principally pork and corn. However, in many of the patients in these regions and in practically all the patients in other regions, there is a history of chronic alcoholism. Even in the chronic alcoholics a food deficiency is evident because of the irregular eating which usually accompanies prolonged drinking bouts. Alcohol might be termed the exciting factor because there is a very definite relationship between pellagra and alcohol, as evidenced by the fact that all people who starve for one reason or another do not develop pellagra. Because of this relationship, the condition I have described has been called alcoholic pseudo-pellagra in the literature.

The cessation of drinking plus the application of any bland ointment is all that is necessary to effect a resolution.

Although the private physician rarely sees patients of this class, there may be patients in higher grades of society who drink alcohol for weeks or months at a time and who may develop the condition.

ARTIFICIAL FEVER THERAPY OF GONORRHEAL OPHTHALMIA*

Case Report

J. M. BERRIS, M.D., M. K. NEWMAN, M.D., and L. E. GRANT, M.D.
DETROIT, MICHIGAN

Since the introduction of artificial fever therapy in the treatment of gonorrhea and its complications, many excellent therapeutic responses have been reported in the literature. Desjardins, Stuhler, and Popp,³ Simpson,⁶ Bierman,² and more recently Metz,⁵ and Hasler and Spekter,⁴ have shown that the destruction of the gonococcus occurs in a high percentage of Neisserian infections of the urethra, fallopian tubes, articular and peri-articular tissues, and the eye.

Knowing well the difficulties encountered in the routine treatment of gonorrheal ophthalmia, we desire to report a case successfully treated by pyretotherapy.

Mrs. E. K., aged twenty-eight, school teacher, with a negative past history and general physical examination, was first seen by one of us (L.E.G.), on April 21, 1936. Her complaint was an increasingly severe swelling, pain, and discharge of the right eye since April 14, 1936. During this time, she had consulted a physician who treated her as a case of non-specific conjunctivitis by means of mild antiseptics with a resultant increase in pain, swelling, and purulency of discharge.

Smear examinations revealed many Gram-negative intracellular diplococci, and a diagnosis of right gonorrheal ophthalmia was made. Routine treatment with twenty-five per cent silver nucleinate instillations and frequent boric acid lavages was instituted, and maintained until May 2, 1936, with unsatisfactory results. On this date, the profuse discharge was still positive for Neisserian organisms, and the conjunctiva had become adherent to the upper one-third of the cornea (the lower one-third of the latter had become deeply ulcerated). Hypopyon had developed, and complete orbital destruction seemed imminent.

Fever therapy was instituted at this time by means of the heated humidified cabinet previously described.¹ The first session consisted of a maintained body temperature (106-07 F. rectally) for six continuous hours. Hourly smears were made during treatment, and these became consistently negative for all organisms within an hour after the desired temperature had been attained.

Within twenty-four hours following treatment, the orbital swelling had begun to subside, discharge had entirely ceased, and the eye was free of pain. During the ensuing four days, smears were made at four hour intervals and revealed only occasional pus cells and a few strands of fibrin. No local treatment was administered following fever therapy. It was felt that the infection had been entirely eradicated, but as a measure of safety a second fever session of the same duration was given. Following this, occurred a rapid resolution of the entire inflammatory process, and when last examined, on June 25, perception for light, color, and large objects had returned. The anterior chamber was clear, and the corneal ulcer had almost completely healed.

Summary

A case of gonorrheal ophthalmia which had proved entirely refractory to usual

*From the Fever Therapy Service, Grace Hospital, Detroit, Michigan.

methods of treatment was cured in two artificial fever sessions.

References

1. Berris, J. M.: Artificial fever: Preliminary report of twenty cases. Jour. Mich. State Med. Soc., 32:355-358, (June) 1933.
2. Bierman, Wm., and Horowitz, E. A.: Treatment of gonorrhea in the female. Jour. A. M. A., 104:1797-1781, (May 18) 1935.
3. Desjardins, A. U.; Stuhler, L. G.; Popp, W. C.: Fever therapy for gonococcal infections. Jour. A. M. A., 104:

- 873-878, (March) 1935; *ibid.*, 106:690-698, (Feb. 29) 1936.
- Desjardins, A. U.: Fever Therapy. Arch. Phys. Ther., 17:206, (April) 1936.
4. Hasler, W. T.; Speker, Louis: Artificial fever in treatment of gonorrheal ophthalmia. Jour. A. M. A., 107:102, (July 11) 1936.
5. Metz, M. H.: Some unusual cases treated with fever therapy. Fifth Annual Fever Conference, (May) 1935. *Ibid.*, Jour. A. M. A., 106:1658-1659, (May 9) 1936.
6. Simpson, W. L.: Report of researches at Miami Valley Hospital; Mayo Foundation Lecture; Proc. Staff Meet. Mayo Clinic; 9:567-571, (September) 1934.
- Kendall, H. W., Webb, W. W., Simpson, W. M.: Artificial fever therapy of gonorrheal arthritis. Am. Jour. Surg., 29:425, (September) 1935.

VON PIRQUET TEST TECHNIQUE

D. S. BRACHMAN, M.D., D.P.H.

DETROIT, MICHIGAN

THE various tuberculin tests include the von Pirquet (cutaneous), the Mantoux (intradermal), the Calmette (conjunctival), the Moro (ointment) and the subcutaneous. Of these only the first two, the von Pirquet and Mantoux, are in common use today. The older Calmette test has given way to the simpler and less risky modern tests; the Moro test is comparatively unreliable; the subcutaneous test is practically never used today in preventive work because of its possibility of causing a reactivation in an otherwise dormant lesion.

The choice between the von Pirquet and the Mantoux tests varies with the physician and the purpose of the test. For diagnosis, where there are clinical symptoms or abnormal physical signs, the Mantoux is probably the method of choice. In preventive programs, however, where large numbers of people are investigated, especially children, many angles suggest a preference for the von Pirquet. In our opinion, the greater part of the difference in reliability between the two tests lies in technique. With proper care as to details of technique, results from the von Pirquet test are comparable to those given by a 0.1 mg. intradermal injection, Mantoux method.

The von Pirquet test is given in a single dose; a needle is not used and thus psychologically children mind it less. The solution used (Koch's old tuberculin) lasts for well over a year and it does not require the use of a diluent. The tuberculin is supplied in Michigan by the Health Department through the local health officers on request. The von Pirquet test requires less time of the physician. Favoring the Mantoux test is the fact that the dose of tuberculin is measured and the amount absorbed known. Also a weaker solution is used in the first dilution. In many cases it is necessary, however, to give two and sometimes three injections. The solution, too, must be freshly prepared. Successful results are procured by testing with Purified Protein Derivative.

Von Pirquet Technique

The left forearm and arm (either arm may be used) are bared to well above the elbow, avoiding the possibility of the sleeve contacting the area tested on bending the arm (Figure 1). An area in the upper forearm, flexor surface, two to three inches from the elbow, is sterilized with 95% alcohol. (Where indicated the area should first be cleansed with soap and water.) A drop of tuberculin is then placed on the site selected *after the skin is completely dry*.

The skin is held taut by the thumb and forefinger of the left hand while the scarifier is held

firmly in the thumb and second finger of the right hand, guiding it with the forefinger (Figure 1). The instrument is held vertically and the skin scarified through the epidermis. The broad end of the scarifier is moved downwards four to ten times, depending on the pressure used by the operator and the



Fig. 1

texture of the skin. An area approximately one-sixteenth of an inch square is scarified or twice the width of the base of the instrument shown in Figure 2. (There are several good instruments on the market, the one illustrated here being a Parke Davis and Company tuberculin scarifier.)

When the von Pirquet test is attempted by physicians for the first time there is a natural tendency to scarify too lightly or too deeply, drawing blood. After a little experience, however, this tendency is readily overcome. It is advisable at first to tend towards insufficient scarification rather than over-scarification. Should there be any doubt in the operator's mind, if he will wait 10 seconds after completing the test and then raise the patient's arm upwards to the level of his eyes, he will see slight pitting of the skin through the drop of tuberculin. If this is not visible further scarification is required.

The texture of the skin, as previously mentioned, is important. Though there are not any hard and fast rules, the skin of females is more likely to be thinner than that of males. Those with blond hair or red hair often have more tender skin than bru-

nettes. In both sexes, however, caution in degree of scarification is required in those having mottled skin, for here the skin is especially tender. Also thin skin is often found in those with marked adiposity.

After the test is completed, the arm is flexed to a

a tuberculin reaction, which usually does not begin to appear till 48 hours after the test. A positive reaction is shown by edema and redness, and occasionally with a small center of necrosis. Where there is doubt in the physician's mind, hardness will be observed by passing a finger over the reaction

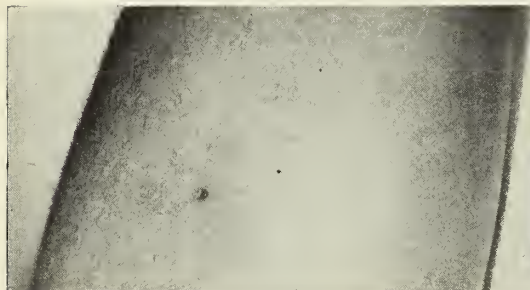


Fig. 2

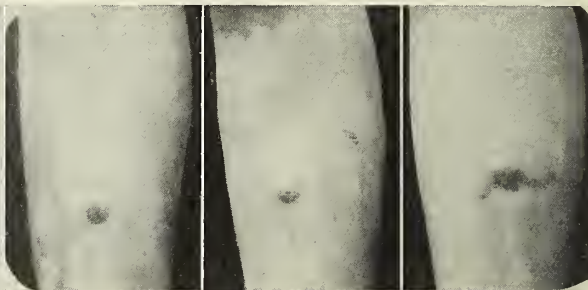


Fig. 3

right angle at the elbow or placed on a desk or a table and exposed to the air for 15 minutes, allowing absorption of the tuberculin. Care is urged not to permit the arm to be dropped to the side or the solution will run downward. Precaution is also required preventing the tuberculin being accidentally rubbed off by contact with clothes. After fifteen minutes the individual tested may enter into any physical activity desired. Generally there is no constitutional reaction involved after the test, the reaction being usually a local one only.

The test is read three to five days after given, though occasionally one finds a delayed reaction the sixth or seventh day. Any swelling or redness appearing the first half hour after the test is not

area. The result is read as positive I, II or III, depending on the severity (Figure 3). Thus far, however, the degree of the reaction has not been very helpful as an index of the presence or absence of active disease.

As neither the von Pirquet or Mantoux test is 100 per cent reliable, when clinical symptoms or abnormal physical signs persist, it is advisable to procure an X-ray of the lungs though the tuberculin test is negative. Also, the fluoroscope, as thus far developed, is not a reliable substitute for the X-ray film either in preventive work among the apparently healthy, or in clinical case-finding. It is very useful, however, for follow-up observations and during collapse treatment.

Light Therapy and Roentgen Therapy in Tuberculosis: Present Evaluation

Edgar Mayer, New York (*Journal A. M. A.*, Nov. 16, 1935), points out that light therapy, both natural and artificial, is of definite value in the treatment of some forms of tuberculosis. Natural heliotherapists, especially those working in high altitudes, emphasize solar radiation and aerotherapy. On the other hand, those in cloudy climates have stressed the use of artificial lights and still others, on occasion, the x-rays. Benefits are undoubtedly obtained by patients suffering from tuberculosis of the bones, articulations, peritoneum, intestine, lymph nodes and larynx when the entire body is exposed to carefully graded doses of natural sunlight or to radiation emitted by certain artificial sources of light rays. The beneficial results of such irradiation are due not only to ultraviolet rays. The visible and infra-red rays, as well as the conditions of the atmosphere, play a certain part in the therapeutic effect. In tuberculosis of the skin, lupus vulgaris alone can be said to respond specifically to light. Scrofuloderma and erythema induratum react favorably at times to general and local exposure, although not as constantly. Lupus erythematosus does not respond to and may be aggravated by light. In tuberculosis of the bones and articulations, it is generally agreed that suitable, graded exposure to natural sunlight is most effective in aiding the healing accomplished by orthopedic and other measures. Exposure to artificial sources is a

second choice. Pulmonary tuberculosis is not an indication for light therapy; stationary pleural tuberculosis has often been helped by this measure. Genito-urinary tuberculosis deserves a trial of such treatment in combination with other measures. Local exposure to ultra violet rays of circumscribed tuberculous lesions of the urinary bladder has been shown to yield favorable results, but the method requires special applying devices and, above all, skillful treatment of the bladder lesion. Ocular tuberculosis and aural tuberculosis, respond infrequently to light. Oral tuberculosis is most resistant. Fistulas are often resistant to such treatment. Postoperative sinuses, in contrast, are most responsive. Intestinal, peritoneal and lymph node tuberculosis especially indicate light therapy and often are rapidly responsive. In tuberculosis, overdosage has produced harmful focal reactions. Here light may set up a focal reaction similar to that of tuberculin. The erythemic reaction is an accurate indicator of skin tolerance. With any form of tuberculosis, light is to be used merely as an adjuvant and should be combined with all other indicated forms of therapy. With bone and joint tuberculosis, orthopedic measures combined with light still play the major rôle. Roentgen therapy of pulmonary tuberculosis has many restrictions and important contraindications. Its healing effect in certain forms of extrapulmonary tuberculosis has been definitely established, but the limitations must be recognized, dosage carefully regulated, and treatments given only by experts in the field.

THE JOURNAL

OF THE

Michigan State Medical Society

PUBLICATION COMMITTEE

A. S. BRUNK, M.D., Chairman.....Detroit
 HOWARD H. CUMMINGS, M.D.....Ann Arbor
 ROY H. HOLMES, M.D.....Muskegon
 VERNON MOORE, M.D.....Grand Rapids

Editor

J. H. DEMPSTER, M.A., M.D.
 5761 Stanton Avenue, Detroit, Michigan

Secretary and Business Manager of The Journal
 L. FERNALD FOSTER, M.D.
 Bay City, Michigan

Executive Secretary

WM. J. BURNS, LL.B.
 2642 University Avenue, St. Paul, Minnesota
 OR
 2020 Olds Tower, Lansing, Michigan

NOVEMBER, 1936

*"Every man owes some of his time to the up-
 building of the profession to which he belongs."*
 —THEODORE ROOSEVELT.

EDITORIAL

TO THE LEGISLATOR

OBJECTIONS are being raised against the Basic Science Bill to be introduced into the next session of the Michigan Legislature. Even Clarence Darrow is lending his opposition in the way of a diatribe on freedom and liberty. What Mr. Darrow really advocates is license rather than liberty. To quote Milton, "License, they mean, when they cry liberty!" Should the state of Michigan through its elected representatives pass a basic science law, it is not demanding any more of the various cults than it has for a long time demanded of the medical profession. This bill is not interfering with anyone's freedom. It is not retroactive and will not interfere in the slightest with the legal or vested rights of physicians, osteopaths or chiropractors or of anyone else. The Basic Science Bill simply defines a minimum of knowledge for those who would practice the healing arts in the broadest sense. It means nothing to the medical or dental professions, inasmuch as they have met its requirements and a great deal more long ago.

* * *

Let us see in plain language what the basic sciences mean. The first is anatomy. To use a common, every-day illustration, anatomy is a knowledge of the shape, position and size of the various parts or organs

of which the human body is composed. Is it too much to ask that anyone know something about these various parts, such as the heart, lungs, kidneys, muscles or brain to mention only a few? These parts are to the human body what the various parts, such as the wheels, motor, body, transmission or crank case are to an automobile. As no automobile repair man would be allowed to attempt to repair an automobile without a knowledge of these parts and how they relate to one another, and their use, why is it unreasonable to expect of anyone who would attempt to treat the human body, were it out of repair, to have a knowledge of the various parts of the body?

The next basic science is physiology. This is simply a study of the way the various parts of the human body work. Why should it be unreasonable that all aspirants to the healing arts, whatever they are, should know physiology? The third basic science is pathology. We would expect an automobile repair man to be able to know what is wrong with an automobile when it does not run properly. When a sick person, or a person who does not feel his normal self, consults any healer, whether it be physician, osteopath, or chiropractor, he expects that person to discover what the trouble is. In the science of medicine, a study which enables one to understand the deranged working of the human body is pathology; in other words, a study of disease as it affects mankind.

The fourth basic science is bacteriology. The germ theory of disease, so-called, is really not a theory. It is a demonstrable fact. Any system of healing which denies it, is a danger to any community in which it is practiced.

The fifth basic science, public health or hygiene, scarcely needs any explanation. The fact that great epidemics that devastated nations in the past and have proved more destructive than hostile armies, have lost their terror, is due to the development of the science of public health, or hygiene. Besides, this is largely a state function and does not concern one profession more than another. Not only the medical profession, but all others should be only too glad to be able to contribute in any way, rather than to refuse to acquire a certain standard of knowledge regarding it.

Lastly, chemistry. The human body, in fact, animal body, is a chemical laboratory

into which food composed of the various chemical elements is taken and broken up into other chemical substances so as to maintain life, and, in the young of the species, to promote growth. Chemistry, as we have it, has been developed largely by non-medically trained persons. What reasonable objection can there be to osteopaths or chiropractors having an understanding of chemistry?

* * *

It has been maintained that there might be unfairness in the conduct of the basic science examinations. The possibility of such a thing is very remote. In the first place, examinations in basic sciences will be given by boards composed of examiners who are not engaged, in any way, in the matter of diagnosing ailments or in treating sick people. Such examinations may be further safeguarded by a system, whereby the candidate is given a number, so that his identity will not be known to the examiner.

The fairness and wisdom of such a measure as proposed should appeal to every thoughtful layman. It recognizes those methods of healing that are already established by law. There is no effort to embarrass the members of any cult or system. In the interest of the public good, it demands only that all future candidates for all systems of caring for the sick meet certain basic requirements.

Can such a measure be unfair or unreasonable?

PROGRESS IN TUBERCULOSIS

THERE is increasing evidence from year to year that the public is becoming more tuberculosis minded. This should be particularly encouraging to the general practitioner who can play his expected rôle with more ease and freedom than has been the case until now. The dread with which the patient received the diagnosis of phthisis made it unpleasant for the doctor and very often he was only too pleased to transfer the patient to "those interested in tuberculosis."

The recent advances in the treatment of this disease by collapse therapy, with its much greater proportion of cures, has given encouragement to the victims of this infec-

tion. No longer do we hear of people wanting to go West to the mountains or South to the warm climes for it is recognized that the treatment in the State of Michigan is not excelled elsewhere. The changing public attitude to tuberculosis thus lends itself to a more active prevention program. It is in the field of prevention that the general practitioner can be particularly helpful to his patients and through them to the community.

One of the important differences between tuberculosis and such infections as measles, diphtheria, smallpox, et cetera, is that in tuberculosis symptoms may not appear for weeks and sometimes for several months after actual onset of the disease. Abnormal physical signs, too, are frequently not discoverable for a long time after the disease is actually established. Another recognized difference is that close and continuous or frequent short contact is required. Since such exposure is most likely to occur in one's immediate family, on the discovery of a clinical case of tuberculosis, it is there that one first looks for the source of the disease as well as for infected contacts.

A disease carrier is recognized as an individual who harbors in his body the specific organisms of a disease without manifest symptoms and thus acts as a distributor of the infection. Such tuberculosis carriers are not infrequently found where people gather regularly whether for work, education or recreation. This is particularly important in overcrowded housing. It is recognized, too, that some people knowingly having active disease become a latent source of contact in deliberately masking their symptoms by calling their condition "bronchitis," "bronchiectasis," et cetera.

General practitioners may well carry out tuberculin x-ray case-finding among the apparently healthy, particularly in the adolescent age and upwards. By this method a much higher percentage of minimal disease is discovered, requiring shorter periods of medical and surgical care than if the victims waited for the appearance of diagnostic symptoms. Equally important is the greatly decreased exposure, both in severity and duration, to family and friends because of earlier isolation. There is also a large financial saving to the community in lessened hospital costs.

WHAT COMPETITION LEADS TO

"Veterans Hospitals are definitely competing with voluntary hospitals and individual medical practice in providing hospital and medical care for patients who do not come within the provisions of the veterans administration legislation . . . The menace of the veterans' hospitals to voluntary hospitals and to the medical profession is real and will assume larger proportions if Congress authorizes the building of these new hospitals and important additions to those already built."

This is an excerpt from the report of the Legislative Committee of the American Hospital Association at the annual meeting of the Association, held in Cleveland, on September 30. It is unfortunate that the preserves of any institution or any individual should be encroached upon. Where there is sufficient hospital accommodation, as there exists today in almost every large city, it is unfair to existing institutions that new and unnecessary ones be built.

It is equally unfair for any hospital to accept patients who can be cared for very adequately by physicians in their private practice. This is true where hospitals offer flat rates for obstetric cases including the lying-in period, as well as attendance of the obstetrician. The same applies to those institutions which accept ambulant patients from outside for x-ray and clinical laboratory examinations which can be made by the independent laboratory specialist. Hospitals enjoy certain privileges, among them exception from taxation. Inasmuch as the hospital depends on the medical profession for patients, it would seem fair that the hospital refrain from competition with members of the medical profession. The function of a hospital is to provide nursing, not medical care, for sick persons. Medical and surgical care is the function of the physician and surgeon.

THE BUSINESS OF THE MICHIGAN STATE MEDICAL SOCIETY

Attention is called to the verbatim report of the House of Delegates which appears in this number of the JOURNAL of the Michigan State Medical Society. An endeavor has been made to index these deliberations for ready reference. As setting forth the business side of the Michigan State Medical Society, the November and February JOURNALS are of particular importance. The JOURNAL endeavors to place before every member of the Society a clear account

of how the business of the Society is being conducted by its elected representatives. In this issue will be found the reports of the standing committees as modified and adopted by the House of Delegates, which is, in the truest sense of the term, a democratic body elected by each county in the state in proportion to the size of its membership.

The February number of the JOURNAL contains, each year, a report of the Council following its annual meeting which presents, among other things, the financial status of the society with the various receipts and disbursements. Each month appear also copies of the minutes of the executive committee of the council, together with the minutes of any meetings of important standing committees which may be held during the month. A perusal of these reports will give the same information that one could obtain if he were to sit in on each meeting that was held. These departments of the JOURNAL show the activities of the elected members of the society in behalf of the whole. Great care is exercised in the matter of publishing the deliberations and reports as accurately as possible.

Recent years have witnessed greater unity in medicine in this state than has ever been shown in the past. Efforts will be made to increase the membership by getting every acceptable and qualified physician into the membership. While the membership has shown a progressive increase in numbers, there are still many first class physicians who are practicing medicine according to the best ethics of the profession who are not, but should be, members of their various county societies.

We Are Their Debtors

A Frenchman is said to have thought the English a very dirty race because they were always bathing.

And by the same token he might have thought Detroit a very unhealthy city because it contains so many doctors.

As it happens, though, this is the healthiest city of its size in the United States, and it has been put out in front in the public health parade and kept there by its physicians, surgeons and sanitary authorities.

A realization of what it owes in health and prestige to the medical profession makes it easy for Detroit to extend a hearty and cordial welcome to the 2,000 and more members of the Michigan State Medical Society and its auxiliary, who gather in it today for their seventy-first annual meeting.

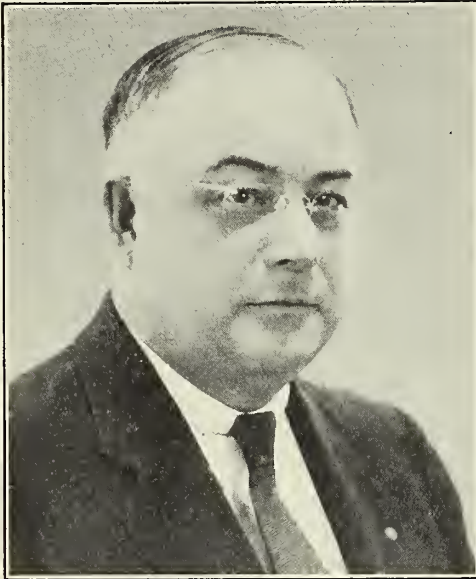
—*Detroit Free Press.*

* * *

Thank you, *Detroit Free Press.* The Michigan State Medical Society appreciates this kindly expression of goodwill.

DR. WILFRID HAUGHEY
Councillor, Third District

Dr. Wilfrid Haughey was graduated from the Battle Creek High School in 1900, and later served an apprenticeship as a printer. He received his A.B. degree from the University of Michigan, M.D. from the Detroit College of Medicine, now



DR. WILFRID HAUGHEY, Battle Creek
*Councillor for the Third District, Michigan
State Medical Society*

Wayne University, and A.M., University of Detroit. He had a regents' appointment as assistant in Chemistry at the University of Michigan and was demonstrator of Anatomy. He was assistant in Pathology under Dr. Hickey in Detroit, and served in the offices of Drs. Don M. Campbell, A. P. Biddle and Angus McLean. He pursued post-graduate study in Chicago, Baltimore, Philadelphia and Boston. His practice has been limited to Eye, Ear, Nose and Throat since 1909.

Dr. Haughey held the office of secretary-editor of the Michigan State Medical Society from 1909 to 1912. He was instrumental in organizing the Section of Ophthalmology and Oto-Laryngology in the Michigan State Medical Society, and also helped organize and was the first secretary of the South-western Michigan Triological Association. He has a membership in the Detroit Oto-Laryngology Society, having once been vice president; is a fellow of the American Academy of Ophthalmology and Oto-Laryngology, also F.A.C.S. He holds a certificate of the American Board of Ophthalmology and the American Board of Oto-Laryngology.

Dr. and Mrs. Haughey have a family of six boys, all Eagle Scouts, and two girls. Dr. Haughey's father, Dr. W. H. Haughey, was for nine years Secretary of the Council. He is now an honorary member of the Michigan State Medical Society.

DR. ROY H. HOLMES
Councillor of Eleventh District

Dr. Roy H. Holmes, who was elected councillor for the eleventh district at the recent annual meeting of the Michigan State Medical Society, graduated

from the University of Michigan Homeopathic School in 1922. He served an internship following a year at the Massachusetts Memorial Hospital. At the end of his interne year, he started to practice medicine in Muskegon. Dr. Holmes is specializing in dermatology and syphilology. At the present writing, he is taking a post-graduate course at the New York Skin and Cancer Hospital in New York



DR. ROY HERBERT HOLMES, Muskegon
*Newly elected Councillor for the Eleventh
District*

City, following which he will resume his practice at Muskegon. Asked for some interesting highlights in connection with his career, Dr. Holmes replied that there is none except the fact that he has remained single for forty years.



DR. PHIL J. RILEY, Jackson
Vice Speaker of the House of Delegates

DEPARTMENT OF SOCIETY ACTIVITY

L. FERNALD FOSTER, M.D., Secretary

COUNCIL CHAIRMAN'S COMMUNICATION

Choosing Your County Society Officers for 1937

ELECTING officers for your county society for the ensuing year should not be by seniority or merely for attainment in scientific endeavor, but by a study of each individual as to his fitness for the post to be filled.

This is a Legislative year.

Choose each officer for his willingness to work, to spend some time from his office, and for his alertness, and his ability to contact others and impress them.

Members of your public relations and legislative committees should be of this type (sometimes known as "politicians"). Usually they are the workers who have the interests of their county society at heart.

Don't let petty misunderstandings interfere with your choosing the right candidate for any county society office.

Psychoanalyze yourself and see if you are doing all you can for your county society. Maybe *you* are the man the society is looking for. Let your ability be known to your county society.

Now is the time to use your efforts for organized medicine. We must be unified and act as *one*.

Choose wisely. We need your help now, and during the coming year.

P. R. URMSTON, M.D.
*Chairman of The Council
Michigan State Medical Society*

COUNCIL AND COMMITTEE MEETINGS

1. Annual Meeting of the Council:
September 20, 1936—First Session, 4 p. m.
September 22, 1936—Second Session, 8 p. m.
September 23, 1936—Third Session, 1 p. m.
Book-Cadillac Hotel, Detroit.
2. October 7, 1936—Executive Committee of The Council, Statler Hotel, Detroit, 2 p. m.
3. October 22, 1936—Mental Hygiene Committee, Eloise Hospital, Eloise, Michigan, 12:30 p. m.

MINUTES OF MEETING OF EXECUTIVE COMMITTEE OF THE COUNCIL

Detroit, September 20, 1936

1. *Roll Call.*—The meeting was called to order in the Book-Cadillac Hotel by Dr. Henry Cook, Chairman, at 2:20 p. m. Present were Dr. Cook of Flint, Dr. A. S. Brunk, Detroit; Dr. H. R. Carstens, Detroit; Dr. C. E. Boys, Kalamazoo; Dr. T. F. Heavenrich, Port Huron; Dr. F. E. Reeder, Flint; also Councilor P. R. Urmston of Bay City, Councilor G. C. Hafford of Albion; President Grover C. Penberthy, Secretary C. T. Ekelund, Past President J. M. Robb, and Executive Secretary Wm. J. Burns.

2. *Minutes.*—The minutes of the Executive Committee of July 29 were read and approved.

3. *Financial Reports.*—The membership and financial reports were presented. Bills payable for the months of August and September were also presented. Motion of Drs. Boys-Reeder that these reports and bills payable be approved and the latter be ordered paid. Carried unanimously.

4. *Tuberculosis Control Service.*—A letter from Dr. C. C. Slemmons, State Commissioner of Health, in answer to the M. S. M. S. letter of August 3, was read. Also a letter from Dr. Henry F. Vaughan, Detroit Commissioner of Health, was read. Both communications were referred to the Preventive Medicine Committee.

5. *Bureau of Information.*—The Executive Committee, on motion of Drs. Heavenrich-Brunk, approved the Bureau of Information as a new department of the Michigan State Medical Society. Carried unanimously.

6. *Group Hospitalization.*—Report was given on the meeting of the Legislative Committee of the Michigan State Medical Society with the Legislative Committee of the Michigan Hospital Association at which the subject of group hospitalization was discussed. The Michigan Hospital Association agreed to send a copy of its proposed legislative bill to the Michigan State Medical Society Legislative Committee.

7. *Fee Schedules A, B, C, D.*—Dr. Ekelund reported for the Subcommittee (Drs. Penberthy, Christian, Ekelund, Foster, Keyport, Purcell, Witwer) which had two meetings and also a conference with the Crippled Children Commission. The Executive Committee authorized 100 copies of this report for members of the House of Delegates, and recommended that the orthopedic schedule also be presented to the House of Delegates at its 1936 meeting.

8. *Coöperation With Other Professional Groups.*—Dr. Cook reported on trip to the Upper Peninsula to meet with and address representatives of the dental, nursing, and social service groups. He reported there were no conflicts at the Marquette meeting and that it was a good beginning toward mutual understanding and future coöperative action.

9. *Adjournment.*—The meeting was adjourned at 4:10 p. m.

ANNUAL MEETING OF THE COUNCIL

THE Annual Meeting of The Council of the Michigan State Medical Society was held in Detroit on the occasion of the seventy-first Convention of the Society. The highlights of the Council meeting, conducted in three sessions, include: Election of the Executive Committee for 1936-37; approval of the committees of the State Society for the ensuing year; plans for three or four meetings of The Council per annum; election of Dr. L. Fernald Foster as Secretary; creation of a Bureau of Information as a department of the State Society; approval of proposed changes in Fee Schedules A, B, C, and D; encouragement of a post-payment plan, operated by the County Medical Society, to aid persons in the borderline group; decision on professional cards in THE JOURNAL; and decision that contributions for entertainment at Annual Meetings of the State Society shall not be levied on the local profession which acts as host.

The minutes of the three sessions of The Council follow:

FIRST SESSION

September 20, 1936

1. *Roll Call.*—The annual meeting of The Council was called to order by Dr. Henry Cook, Chairman, in the Founders Room of the Book-Cadillac Hotel, Detroit, September 20, 1936, at 4:20 p. m. Those present were Dr. Henry Cook, Flint; Dr. C. E. Boys, Kalamazoo; Dr. Wm. E. Barstow, St. Louis; Dr. A. S. Brunk, Detroit; Dr. F. C. Bandy, Sault Ste. Marie; Dr. F. A. Baker, Pontiac; Dr. H. R. Carstens, Detroit; Dr. Geo. C. Hafford, Albion; Dr. T. F. Heavenrich, Port Huron; Dr. J. E. McIntyre, Lansing; Dr. Harlen MacMullen, Manistee; Dr. W. A. Manthei, Lake Linden; Dr. V. M. Moore, Grand Rapids; Dr. F. E. Reeder, Flint; Dr. P. R. Urmston, Bay City; Dr. B. H. Van Leuven, Petoskey. Also present: President Grover C. Penberthy, Detroit; President-elect H. E. Perry, Newberry; Secretary C. T. Ekelund, Pontiac; Editor James H. Dempster, Detroit; Past President J. M. Robb, Detroit; Dr. J. D. Brook, Grandville; Dr. C. S. Gorsline, Battle Creek; Dr. Frank H. Purcell, Detroit; and Executive Secretary Wm. J. Burns. Absent, Dr. H. H. Cummings.

2. *Minutes.*—The minutes of the Executive Committee meeting of September 20, 1936, were read and approved, and the minutes of the mid-winter meeting of The Council and of the meetings of the Executive Committee since that date were approved as printed, motion of Drs. Bandy-Baker. Carried unanimously.

3. *Annual Report of The Council.*—The proposed annual report was presented and read, paragraph by paragraph. (Recess taken from 6:15 to 8:15 p. m.) After a full reading and thorough discussion, motion was made by Drs. Hafford-Bandy that the report as read be approved. Carried unanimously.

The question of including in the Annual Report of The Council, the recommendation of the Special Committee appointed to study Schedules A, B, C, D, was discussed. Dr. Purcell, President of the Michigan Orthopedic Society, presented the revised fee schedule for orthopedic procedures in the care of crippled children under the state law. Motion of Drs. Heavenrich-MacMullen that the Chairman of the Special Committee on Study of Schedules A, B, C, D, shall present this report, including the orthopedic schedule, to the House of Delegates at its 1936 session. Carried unanimously. It was recommended that Drs. Purcell, and E. R. Witwer of the Michigan Radiological Society attend the

meeting of the Reference Committee at which this report will be studied.

4. *Post-Payment Plan.*—The Chair requested that the outline of a post-payment plan which is being operated by one county medical society in Michigan be read to The Council. Dr. Cook stressed the need for the integration of post-payment plans for the borderline group by individual county medical societies.

5. *British Medical Association Secretary.*—Dr. Ekelund mentioned that Dr. Charles Hill, Deputy Medical Secretary of the British Medical Association, would be in Detroit on October 5 or 6 to discuss socio-economic matters. Motion of Drs. Carstens-McIntyre that the President, the Chairman of The Council, the Medical Secretary, and the Executive Secretary be designated as a committee to meet Dr. Hill, and to invite others to meet with him, and to arrange the contact as they see fit, with power to act. Carried unanimously.

6. Dr. Brunk presented the matter of professional cards in THE JOURNAL, as The Council of the Wayne County Medical Society wished to ascertain the viewpoint of The Council of the Michigan State Medical Society on this practice. This was thoroughly discussed, and resulted in a motion by Drs. Brunk-McIntyre that inasmuch as the publication of professional cards is a generally-accepted practice in state medical society journals, circulating only to the medical profession, and is considered an ethical practice by the American Medical Association, that same be continued in THE JOURNAL of the Michigan State Medical Society. Carried unanimously.

7. *Dr. B. D. Harrison Tablet.*—Dr. Bandy reported for the Committee (Drs. Bandy, Manthei, Perry) on the erection of a tablet in Sault Ste. Marie to the memory of Dr. B. D. Harrison, part of the expense of which is to be borne by the Michigan State Medical Society. Dr. Bandy stated that the Committee recommended that the tablet be erected in the hospital at Sault Ste. Marie. Motion of Drs. Heavenrich-McIntyre that the committee recommendation be approved. Carried unanimously.

8. *Technical Exhibitors.*—President Penberthy spoke of the technical exhibit of 72 booths and urged all Councilors to visit each, meet the exhibitors, introduce themselves, and show their interest and appreciation of the efforts of these friends of the profession.

9. *Adjournment.*—The meeting was adjourned at 9:47 p. m.

SECOND SESSION

September 22, 1936

1. *Roll Call.*—The meeting of The Council was called to order by Dr. Henry Cook, Chairman, at 7:50 p. m. in the Founders Room, Book-Cadillac Hotel, Detroit, September 22, 1936. Those present were Drs. Henry Cook, Flint; F. T. Andrews, Kalamazoo; F. A. Baker, Pontiac; F. C. Bandy, Sault Ste. Marie; W. E. Barstow, St. Louis; A. S. Brunk, Detroit; H. R. Carstens, Detroit; H. H. Cummings, Ann Arbor; I. W. Greene, Owosso; T. F. Heavenrich, Port Huron; R. H. Holmes, Muskegon; H. MacMullen, Manistee; W. A. Manthei, Lake Linden; J. E. McIntyre, Lansing; V. M. Moore, Grand Rapids; B. H. VanLeuven, Petoskey, and P. R. Urmston, Bay City. Also present: President Grover C. Penberthy, Detroit; President-elect H. E. Perry, Newberry; Secretary C. T. Ekelund, Pontiac; Executive Secretary Wm. J. Burns and guests. Absent: Dr. G. C. Hafford.

2. *Organization of The Council.*—Dr. P. R. Urmston was elected as Chairman of The Council, and spoke briefly on the aims and hopes of his administration. Dr. T. F. Heavenrich was chosen as Vice Chairman of The Council. Dr. H. R. Carstens was elected as Chairman of the Finance Committee. Dr. J. E. McIntyre was chosen as Chairman of the County Societies Committee. Dr. A. S. Brunk was elected as Chairman of the Publication Committee.

3. *Place of Annual Meeting.*—This matter, referred to The Council by the House of Delegates, was discussed. An invitation on behalf of the city of Grand Rapids was extended by a representative of the Grand Rapids Convention Bureau. The Chair stated that the Grand Rapids facilities would be investigated. By action of The Council, the choice of the meeting place was deferred until a report on this investigation is presented.

4. *Chairman of P. R. C.*—The Chair spoke of Dr. L. Fernald Foster's work during the past year as Chairman of the P. R. C. He has traveled 9,910 miles and covered 72 of the 83 counties. Motion of Drs. Brunk-MacMullen that Dr. Foster be given an honorarium of \$500 to cover part of his expenses since November, 1935, and a vote of thanks by this Council for his excellent and untiring work with the Public Relations Committee of the Michigan State Medical Society. Carried unanimously.

5. *Recess.*—Motion of Drs. McIntyre-Carstens that The Council recess to Wednesday, September 23, 12:30 p. m. Carried unanimously.

The Council recessed at 8:45 p. m.

THIRD SESSION

September 23, 1936

6. *Roll Call.*—The meeting was called to order by Dr. P. R. Urmston, Chairman, at 12:55 p. m. in the Book-Cadillac Hotel, Detroit. Those present were Drs. Henry R. Carstens, Detroit; J. E. McIntyre, Lansing; George C. Hafford, Albion; F. T. Andrews, Kalamazoo; Vernor M. Moore, Grand Rapids; I. W. Greene, Owosso; T. F. Heavenrich, Port Huron; W. E. Barstow, St. Louis; Harlen MacMullen, Manistee; P. R. Urmston, Bay City; Roy H. Holmes, Muskegon; F. C. Bandy, Sault Ste. Marie; B. H. Van Leuven, Petoskey; H. H. Cummings, Ann Arbor; Frederick A. Baker, Pontiac; A. S. Brunk, Detroit; W. A. Manthei, Lake

Linden; Frank E. Reeder, Flint; Henry E. Perry, President, Newberry, and Executive Secretary Wm. J. Burns.

7. *Remarks by the Chairman.*—Dr. Urmston outlined the work of the Councilors for the ensuing year, stressing the requirement of activity by each Councilor in his own District. He urged the Councilors to make tours of their counties at the earliest possible date, especially before the meeting of the Legislature, so that the Councilors could explain the proposed basic science bill to the physicians, who, in turn, could contact the Legislators and supply authentic information. He mentioned several county medical societies which are holding dinners for the physicians and legislators.

Dr. Urmston stated we must support President Perry and all future presidents in their work of making the Michigan State Medical Society a better organization. He asked each member of the Executive Committee to write him re the best dates for the meetings of this Committee, stating that most of the Executive Committee meetings this year would be held in Lansing, due to the meeting of the Legislature.

8. *Minutes.*—On motion of Drs. Brunk-Andrews, the minutes of The Council meeting of September 20, 1936, and of The Council recessed session of September 22, 1936, were approved. Carried.

9. *Resignation of Secretary Ekelund.*—Dr. Cummings presented the following letter of resignation from Dr. C. T. Ekelund:

"To the Council of
The Michigan State Medical Society
Greetings:

"I hereby tender my resignation as Secretary of the Michigan State Medical Society, effective as soon as a proper audit of the Society's finances can be accomplished and approved by the Executive Committee.

Signed, C. T. EKELUND, M.D.

Sept. 23, 1936."

Motion of Drs. McIntyre-Heavenrich that the resignation of Dr. Ekelund be accepted and that his salary be continued until such time as the audit of the Michigan State Medical Society books is accepted by the Executive Committee of The Council. Carried unanimously.

Motion of Drs. Cummings-Holmes that the Chair appoint a committee to draw up resolutions commending Dr. C. T. Ekelund for his fine work as Secretary of the Michigan State Medical Society. Carried unanimously. Committee: Drs. Cummings and Carstens.

10. *Election of New Medical Secretary.*—Dr. McIntyre nominated Dr. L. Fernald Foster of Bay City for the position of Secretary of the Michigan State Medical Society, and spoke re the tremendous amount of work which Dr. Foster as Chairman of the Public Relations Committee had done during the past year for the State Society. The nomination was supported by Drs. Heavenrich, Bandy and others. Upon motion duly made, seconded and carried, the nominations were closed and the secretary was instructed to cast the unanimous ballot of The Council for Dr. Foster as Secretary, and he did so cast. Dr. Foster was thereupon announced by the Chair as Secretary of the Michigan State Medical Society.

11. *Committees for 1936-37.*—President Perry presented his committees for the ensuing year. Each of the standing and special committees was studied by The Council and individually approved. Mo-

tion of Dr. Brunk, seconded by several, that the list of committees be approved in toto. Carried unanimously.

12. *Technical Exhibits.*—Motion of Drs. Moore-McIntyre that in future contracts with technical exhibitors at Michigan State Medical Society annual meetings, a clause be inserted that materials and equipment not accepted by the American Medical Association Council shall not be allowed in the exhibit of the Michigan State Medical Society. Carried unanimously.

13. *Audit of the Books.*—Motion of Drs. Carstens-Cummings that the firm of Ernst & Ernst be instructed to audit the books of the Michigan State Medical Society immediately. Carried unanimously.

14. *Additional Meetings of The Council.*—The suggestion of the Reference Committee on Annual Report of The Council at the House of Delegates meeting of September 22, 1936, that The Council hold three or four meetings a year, was discussed. A Spring meeting of The Council was planned.

15. *Cost of Entertainment at Annual Meetings of the Michigan State Medical Society.*—The Council discussed the sentiment of local physicians, prospective hosts of the Michigan State Medical Society Annual Meeting, that the cost of entertaining dampened their enthusiasm for holding Michigan State Medical Society meetings in their communities, with the result that few invitations were being presented of late to the House of Delegates. Motion of Drs. Moore-Heavenrich that the Michigan State Medical Society assume all the details of its Annual Meeting by having a special Michigan State Medical Society committee appointed to handle all matters, said State Society Committee to be augmented by physicians located in the city where the Convention is to be held, all to be under Michigan State Medical Society direction, and with no additional contribution for entertainment to be levied on the local profession. Carried unanimously.

16. *Adjournment.*—The meeting was adjourned at 2:15 p. m., after the Chair had thanked all for their attendance, helpful suggestions and sound advice.

Hypoglycemic State in Treatment Of Schizophrenia

Bernard Glueck, Ossining, N. Y. (*Journal A. M. A.*, Sept. 26, 1936), states that the evidence is far from conclusive that the effects of the hypoglycemic state and of the insulin shock in patients with schizophrenia is something specific to this form of disorder. The average patient's reaction to this sudden deprivation of the organism of its sugar content has much in it of the nature of a profound organismal and personality disintegration. No other form of psychiatric therapy requires as much care, skill and caution in its application as does this. Four deaths have been recorded in connection with the treatment, three in Vienna and one in Switzerland, but it is impossible to state with accuracy what percentage this constitutes of the total treated. While undergoing the treatment, the patients appear to be in fine physical condition, usually gain weight, and, aside from a slight sense of fatigue, do not complain of physical discomfort during the time when they are not in the hypoglycemic state. The object is to achieve a progressive insulinization of the patient through the intramuscular administration of daily increasing doses of insulin until the so-called shock dose is attained.

COUNTY SOCIETIES

CALHOUN COUNTY

The September meeting of the Calhoun County Medical Society was called to order at 8:00 p. m., Tuesday evening, September 1, 1936, at the Kellogg Hotel, by the president, Dr. R. C. Winslow.

Minutes of the last meeting were approved as published in the *Bulletin*.

The secretary read communications as follows:

One from Mrs. L. G. Fell to President Winslow regarding the establishment of a Service League to cooperate with the Calhoun County Medical Society and the Battle Creek Academy of Medicine and Dentistry. The purpose is to establish a health center for the education of expectant mothers in pre-natal care and in fundamental health routine of infants and pre-school children.

After some discussion a resolution was adopted to refer to the Battle Creek Academy of Medicine and Dentistry for the appointment of a committee to investigate and study, and if found advisable to cooperate.

A letter from R. H. Kirschman, stating that he appreciates the medical problems in the probate judge's work and will cooperate. Upon motion, this letter was placed upon the table. Two other candidates have visited our officers and committees and pledged their cooperation also—Schroeder, of Marshall, and Aldrich, of Battle Creek.

The secretary presented a communication from the state secretary and excerpts from the state secretary's formal letter, calling our attention to the help received and courteous response from Representative Frey and Senator Baldwin, both of whom are up for renomination and are not unopposed. We need such representatives as these at Lansing.

There was considerable discussion by our members and by Dr. Jacob Burley, president St. Clair Medical Society, a guest, and by Dr. T. F. Heavenrich, councilor of the sixth district, and also a visiting guest.

The amendment to the Constitution was read a second time and adopted unanimously. Article 3, Section 1, first sentence to be changed to read: "The annual dues of this society shall be five dollars plus the annual Michigan State Medical Society assessment."

The application of Dr. Archie E. Humphrey of Marshall was read a second time and he was unanimously elected to membership.

The application of Dr. Leland R. Keagle, Battle Creek (Northwestern, 1934), recommended by Doctors MacGregor and Overholt, and of Dr. Alice F. Campbell, Albion (University of Michigan, 1933), recommended by Doctors Hafford and Curry, were given a first reading and held over until next month. Dr. Melges announced that the next meeting will be a joint meeting with the Calhoun County Bar Association at our regular time.

He introduced Dr. G. deTakats, professor of surgery, University of Illinois, Chicago, who talked and gave a lantern demonstration of the "Treatment of Varicose Veins." This was a most practical talk, giving the when, the how, and when not to—very few big words and all understandable. Several questions were asked by Doctors MacGregor, Mustard, Rosenfeld and Gorsline.

The meeting adjourned. Attendance at dinner, 45; at meeting, 64.

WILFRID HAUGHEY,
Secretary.

JOUR. M.S.M.S.

MANISTEE COUNTY

As a rule, Society meetings follow a usual routine and get a little humdrum. To keep things moving, our society takes a hypodermic, once in every little while. For our September tonic, we met on top of a wooded bluff, high up over Lake Michigan, about ten miles from town, where we had a beautiful view of the lake, and also could look all over Portage Lake.

Roll call showed all present but two, and one of those happened to be in the opposite end of the state. For refreshments, each had a thick, juicy steak grilled over an open fire, with all the usual side issues to a good square meal, and topped off with good old fashioned pie.

If any society finds interest lagging, just advise them to try out something like this. It is "the berries."

C. L. GRANT, M.D.,
Secretary-Treasurer.

NORTHERN MICHIGAN

The first regular meeting of the Northern Michigan Medical Society, following the summer vacation, was called to order at the Hotel Perry, Petoskey, September 10, with President Engle in the chair. The following members were present: Engle, Van Leuven, Mast, Conway, Brenner, Grillett, McMillan, Dean and Saltonstall.

The minutes of the May meeting were read and approved. The secretary then read the accumulated correspondence as follows: A letter from Dr. C. C. Slemmons of the State Board of Health, announcing a series of post-graduate lectures and conferences in Obstetrics at the Community Center, Petoskey, beginning on the evening of Tuesday, September 29. These lectures are to be given by Dr. Alexander Campbell of Grand Rapids and will continue once weekly for six weeks.

A letter from the Detroit Dermatological Society offering the services of a speaker on dermatology and syphilology for one of our meetings in the near future.

A letter from the W. A. Baum Co., stating that they are vigorously opposed to the capitalization by lay persons on blood pressure readings and that they are doing everything in their power to prevent the sale of their instruments to others than the medical profession.

A copy of a resolution of the Emmet County Board of Supervisors in answer to the motion of the Society at the May meeting to revert to the original fee schedule for medical services to indigents in Emmet County. The resolution read as follows: "Resolved: That we continue our present schedule of payment for medical services." The resolution was passed with but one dissenting vote, that of our good brother, Dr. Frank.

A letter to Councilor Van Leuven from Dr. Cummings, chairman of the Michigan State Medical Society Legislative Committee, asking our support and influence towards the reelection of legislators who have proven themselves friends of the medical profession in the past.

Dr. Brenner presented his resignation as Secretary of the Society made necessary by his leaving this locality. Dr. McMillan moved a vote of thanks to Dr. Brenner for his capable and efficient work as Secretary of our Society for the past six years and wished him all success in his new endeavors. Supported by Dr. Conway the motion was passed unanimously. President Engle appointed Dr. Saltonstall as Secretary until the regular election of officers.

The Secretary was instructed to invite the nurses of the hospitals in our district to the series of obstetrical lectures, beginning September 29.

A suggestion was made that the next regular meeting be held on the night of Tuesday, October 6, in order to coincide with the second obstetrical lecture night.

President Engle appointed Dr. Dean as Program Committee for December.

The meeting was adjourned.

GILBERT B. SALTONSTALL, M.D.,
Secretary.

WAYNE COUNTY

The Medical Service Bureau, during the past six months, has undergone a critical analysis by a group of impartial citizens and business men, appointed through the Health Council of Metropolitan Detroit. An interesting and favorable report of 26 pages is just off the press. Before publication, it will be studied by the Health Council, and by the Board of Trustees of the Wayne County Medical Society (the Trustees have direct control of the Medical Service Bureau). To many authorities on the social aspects of medical care, this post-payment plan for meeting the costs of sickness where and when they arise is the logical, fair, and American way to solve the problem that confronts us.

* * *

The regular weekly meetings of the Wayne County Medical Society started October 5, in the Lecture Hall of the Detroit Institute of Arts. An audience of 400 heard Dr. Louis B. Wilson, Professor of Pathology and Director of the Mayo Foundation, Rochester, Minnesota, explain the "National Specialty Qualifying Boards in Relation to Graduate Medical Education." Dr. Wilson was introduced by Dr. Raymond B. Allen, Dean of the Wayne University College of Medicine. Dr. T. K. Gruber presided.

Dr. Everett D. Plass, Professor and Director of the Department of Obstetrics and Gynecology of the State University of Iowa, spoke on October 12, on "The Induction of Labor." He was introduced by Dr. George Kamperman of Detroit. Dr. P. L. Ledwidge acted as chairman of the meeting. "Latent Syphilis as a Cause of Heart Disease" was the subject chosen by Dr. Roy W. Scott, Professor of Clinical Medicine of Western Reserve University School of Medicine, Cleveland, for his address before the Wayne County Medical Society, on October 19. Dr. Edward D. Spalding of Detroit introduced Dr. Scott. Dr. T. K. Gruber presided.

Dr. Victor G. Heiser of New York, the author and scientist, addressed the Society on October 26. A record crowd heard him tell of his medical adventures during sixteen trips around the world. Dr. Walter L. Hackett was chairman of this meeting.

* * *

An Annual Medical Ball is being discussed in Detroit by officers and members of the Wayne County Medical Society. It is hoped that such an affair can be arranged this winter and developed as an annual event.

C. E. UMPHREY, M.D., *Secretary.*

Treatment of Dementia Paralytica

Clarke H. Barnacle, Franklin G. Edbaugh and Jack R. Ewalt, Denver (*Journal A. M. A.*, Sept. 26, 1936), report on a comparative study of combined artificial fever and tryparsamide versus therapeutic malaria in the treatment of sixty cases of dementia paralytica over a one year period. Chemotherapy followed both methods. During this period in the artificial fever series 70 per cent (twenty-one patients) were definitely benefited, while in the malaria group 63.3 per cent (nineteen cases) were likewise helped. The serologic reactions of the cerebrospinal fluid in both groups did not parallel the clinical results.

MICHIGAN'S DEPARTMENT OF HEALTH

C. C. SLEMONS, M.D., Dr.P.H., Commissioner
LANSING, MICHIGAN

Sixteenth Annual Public Health Conference

The Sixteenth Annual Public Health Conference sponsored jointly by the Michigan Department of Health and the Michigan Public Health Association will be held in Lansing at Hotel Olds November 11, 12 and 13. Allied health organizations such as the State Organization for Public Health Nursing, the Michigan Association of School Physicians, and the Michigan Association of Sanitarians will hold their annual meetings in conjunction with the Conference.

Surgeon General Thomas Parran, Jr., chief of the United States Public Health Service, heads the list of distinguished speakers who will appear at the Conference. Dr. Clara M. Davis of Chicago Children's Memorial Hospital is also scheduled to speak at the opening afternoon session.

General conference sessions will be devoted to the coordination and promotion of the whole field of public health while round table groups take up specific phases of interest to group members. The State Organization for Public Health Nursing will hold a pre-conference session Wednesday morning followed by a luncheon. Michigan Association of School Physicians will hold its business meeting at a luncheon on Wednesday and meet for a post-conference session on Friday afternoon.

Conference sessions will be open to all members of the health professions as well as lay persons interested in public health. There are no fees for admittance to the sessions. Further information regarding the conference program may be secured from the Michigan Department of Health, Lansing.

New County Health Directors

Dr. T. E. Camper of Camden, Delaware, has been appointed health director of Iron County and will maintain department headquarters at Stambaugh. Dr. Camper was formerly school physician at Hightstown, N. J., and holds a certificate in public health from the University of North Carolina.

Dr. L. V. Burkett, Akron, Ohio, became director of the Midland County Health Department October 1, succeeding Dr. David Littlejohn, who has become director of Chippewa County Health Department. Dr. Burkett was formerly professor of hygiene and public health at DeKalb Teachers' College.

Dr. F. G. Austin, formerly director of county health administration for the Wyoming state board of health, assumed his new duties as director of the Houghton-Keweenaw Health Department October 1. The offices of this department are located at Houghton.

Dr. Frank Carroll has been appointed director of the VanBuren County Health Department.

Dr. L. H. Gaston will relieve Dr. E. V. Thiehoff as director of District No. 7, including Clare, Gladwin and Arenac counties, while Dr. Thiehoff is on leave of absence attending the Johns Hopkins School of Public Health.

Postgraduate Lectures in Obstetrics

Many physicians in the northern counties of lower Michigan are attending the postgraduate lectures in obstetrics given at Traverse City, Petoskey, Alpena and Grayling by Dr. Alexander M. Campbell of Grand Rapids, chairman of the maternal health committee of the Michigan State Medical Society.

More than two-thirds of the deaths and disabilities associated with childbirth are preventable, Dr. Campbell told the seventy physicians who attended the opening lectures. The responsibility for this condition has been placed squarely on the shoulders of the medical profession, he said. Thus it becomes a vital phase of the physician's service to his community, he said, to educate the public in what constitutes efficient maternal care and to insist that his patients obtain that care early.

The obstetrician must be consulted early, said Dr. Campbell, even before parenthood is contemplated, if we are to reduce our maternal mortality and morbidity. The increasing feminine demand for "painless" births through various types of artificial interference was condemned by Dr. Campbell, who urged doctors to combat this tendency in favor of more normal deliveries unless complications intervene.

Dr. Campbell's illustrated lectures are continuing for six weeks at Traverse City on Monday; Petoskey, Tuesday; Alpena, Wednesday; and Grayling, Thursday. Lecture subjects for the succeeding meetings include "Adequate Prenatal Care," "Toxemias of Pregnancy," "Conduct of Normal Labor," "Management of Common Complications of Labor," and "Postpartum Care."

The lectures are sponsored by the Michigan Department of Health with the cooperation of the Michigan State Medical Society and the University of Michigan.

Improved Laboratory Service for Physicians

Greater efficiency and speed of laboratory diagnostic and analytical service to the physicians of the state will be possible with the facilities made available by the virtually completed new \$175,000 laboratory at the Biologic Products Division of the Michigan Department of Health.

The new laboratory, constructed as a WPA project three miles northwest of Lansing on the site of the other units of the present biologic plant, will give Michigan one of the most complete public health laboratory services in the nation. The three-story brick and concrete structure will centralize all laboratory agencies now maintained by several state departments.

Public health activities will include an improved service in the production and free distribution of biologics to physicians and local health departments. Such biologics are now produced for the control or prevention of smallpox, diphtheria, scarlet fever, rabies, tetanus, typhoid fever, tuberculosis, meningitis and ophthalmia neonatorum. Research is now being carried on looking to the development of preventives for pneumonia, whooping cough and possibly influenza.

Routine laboratory services are also extended to physicians in the diagnosis or analysis of the following diseases or conditions: Amebiasis, anaerobic infections, bacillary dysentery, diphtheria and diphtheria carriers, gonorrheal infection, intestinal parasites, malaria, meningitis, mycoses, pertussis, pneumonia and other pneumonia infections, poliomyelitis, psittacosis, rabies, septic sore throat, septicemia, syphilis (serodiagnosis for patients unable to pay regular commercial fee), tuberculosis, tularemia, typhoid fever and typhoid carriers, undulant fever and Vincent's infection. Specimen outfits will be mailed to physicians upon request.

The Department of Health laboratories also carry on bacteriological and chemical examinations of water and sewage; bacteriological examination of milk, food and other specimens related to epidemics; and bacteriological, toxicological and other examinations of material suspected of causing occupation-

al pathology. Legal departments of state and local governments are offered service in the examination of post-mortem material, drugs, urine, gastric contents or other specimens of medico-legal significance.

These services are available to physicians at the Lansing laboratories as well as at the Branch Laboratory at Houghton or the Western Michigan Division Laboratory at Grand Rapids.

Communicable Disease Incidence

Scarlet fever has, during the last month, continued at a slightly higher incidence than for a year ago. At this writing the time for the sharp seasonal increase has not arrived but it is anticipated that such an increase may reach greater proportions than that of last year.

On the other hand, poliomyelitis continues very low. The total number of cases reported from January 1 to the end of September is 68. For the same period of last year there were 470 cases reported.

The incidence of typhoid fever continues very low. This is the first year since the time of our intensive typhoid control work that one or more outbreaks of the disease have not come to our attention previous to this date. All cases so far reported have been "sporadic." The number of cases reported from January 1 to the end of September was 180. The number reported for the same period last year was 255.

During the month of September there occurred several cases of smallpox in Muskegon Heights. As a result of this, the health officers of Muskegon Heights and Muskegon have stimulated vaccination campaigns and quite a number have been immunized against smallpox. The cases in Muskegon Heights were more severe and typical of the smallpox that the older physicians are acquainted with than anything which has come to light in the state for some time past. Although the number of cases was limited to a half dozen or less, this is a greater concentration of typical cases than has been seen elsewhere.

Recently there have been reported two cases of typhus fever. These are the first cases of the disease that have been reported in Michigan for several years. There is apparently no connection between the two, the one being in the extreme western part of the state, Benton Harbor, and the other in Detroit. The Benton Harbor case was hospitalized in Chicago.

Slow Carbon Monoxide Asphyxiation: Neglected Clinical Problem

Harvey G. Beck, Baltimore (*Journal A. M. A.*, Sept. 26, 1936), reports on a series of carefully studied cases of slow carbon monoxide asphyxiation. The symptoms exhibited have been correlated with the pathologic lesions produced in experimental animals and found at autopsy. The results establish the fact that slow carbon monoxide asphyxiation (anoxemia) produces a definite clinicopathologic entity despite views held to the contrary. The symptoms arise predominantly from organs rich in blood supply, thus demanding much oxygen, such as the central nervous system and the heart muscles. Owing to doubt and uncertainty as to the actual existence of the malady and a scant literature on the subject, the condition is not generally recognized by the profession and its importance has been underestimated. Since there is no medicinal remedy when the organic changes have once developed, treatment must be directed toward its prevention by proper public health measures.

OBITUARY

Dr. Murdock M. Kerr

1871-1936

Dr. Murdock M. Kerr, well known in Detroit in both medical and civic affairs, died September 12, 1936. Dr. Kerr was born on October 8, 1871, in Kincardine, Ontario. After being graduated from the Detroit College of Medicine and Surgery, he began his medical practice in the copper country of Northern Michigan, and came to Detroit after the World War. He served in the 119th Field Artillery in France and, while directing an evacuation in a first aid station, was wounded during the second battle of the Marne. He achieved the rank of Lieutenant Colonel. Dr. Kerr was an active member of the Wayne County Medical Society, as well as having taken a great interest in civic affairs. In 1929 he was a candidate for the Detroit Common Council and in 1931 directed the taking of the census of the west side in Detroit.

Dr. Kerr is survived by his wife, Antoinette; two sons, Murdock, Jr., and Jack; and a daughter, Elizabeth; a sister, Miss Anna Kerr; and a brother, John, of Calumet, Michigan.

Artificial Fever in Treatment of Gonorrheal Ophthalmia

As fever treatment of gonorrheal infections in various parts of the body is beneficial and as the lethal death time of *Heisseria gonorrhoea* at 41.5 C. (106.7F.) varies between six and twenty-four hours, W. T. Hasler, Jr., and Louis Spekter, Durham, N. C. (*Journal A. M. A.*, July 11, 1936), treated six cases of gonorrheal ophthalmia with radiant energy. Treatments for five hours at 41.5 C. or lower (never higher) may be given instead of the twelve hourly period, which requires two or three shifts of nurses. However, more treatments will be required. During the first two or three hours of fever the conjunctival discharge diminishes rapidly in amount and the edema becomes less, allowing the irrigating solution to reach all parts of the conjunctiva. Toward the end of the treatment the changes have progressed, so that the cornea, which perhaps could not be seen well before treatment, because of chemosis, now can be more clearly observed. Irrigations may be continued with ease for the next few days. Gonococci, which still may be present, seem to be less resistant to antiseptics. Though irrigations may not be necessary, it is wiser to carry them out at intervals of four hours. If the infection is not eradicated by the first treatment, the inflammatory process may recur in two or three days, when a second treatment should be given. Of the six patients having gonorrheal ophthalmia the organisms disappeared after one or two treatments in five. In the sixth the gonococci disappeared one week following the second treatment.

Counsel was showing how easy it is for a man to make a wrong statement. "When I left home this morning," he said, "I could have sworn that I had my watch with me. But now I recollect leaving it on the bathroom window-ledge."

When he arrived home that evening, his wife said: "What a fuss to make about a watch! Fancy sending ten men for it! Of course I gave it to the first messenger. He knew where it was."

◆ General News and Announcements ◆

You can't think of THE JOURNAL without thinking of the advertisers who support it.

* * *

Afflicted Child Commitments:

September, 1936—1,270 cases, of which 227 went to University Hospital.

* * *

Crippled Child Commitments:

September, 1936—216 cases, of which 80 went to University Hospital.

* * *

The Hack Shoe Company of Detroit has already placed an order for an exhibit in the 1937 Exhibition of the Michigan State Medical Society.

* * *

Dr. Harrison G. Palmer, formerly of Detroit, has moved to St. Petersburg, Florida, where he has resumed the practice of medicine.

* * *

The name of the Jefferson Clinic, Detroit, which was founded in 1911, has been changed to the Alexander Blain Hospital. It is located at 2201 Jefferson Avenue E., Detroit.

CHRISTMAS IS COMING!

Don't rack your brain over the selection of a suitable gift for a physician-friend. Send him the

Medical History of Michigan
Two Volumes . . . Five Dollars

The Standing and Special Committees of the Michigan State Medical Society for 1936-37, as appointed by President Henry E. Perry and approved by The Council, are published in this issue of THE JOURNAL, page vi.

* * *

At the annual meeting of the section on surgery of the Michigan State Medical Society, Dr. Charles S. Kennedy of Detroit was elected chairman for one year and Dr. William Torgerson of Grand Rapids, secretary for two years.

* * *

Dr. E. V. McCollum, professor in the School of Hygiene and Public Health of Johns Hopkins University, Baltimore, has accepted the invitation to deliver the Beaumont Lectures for 1937, given under the auspices of the Wayne County Medical Society.

* * *

The Calhoun County Medical Society held a joint meeting with the Calhoun County Bar Association on Tuesday, October 6, 1936, at the Athelstan Club, Battle Creek. The speaker of the evening was Dean Leon Green of Northwestern University School of Law.

Dr. I. W. Greene of Owosso has been appointed chairman of the County Societies Committee of The Council to take the place of Dr. J. Earl McIntyre, resigned. Dr. Greene becomes a member of the Executive Committee of The Council by virtue of his chairmanship.

* * *

Approximately 215 doctors were licensed by examination during 1936 to practice medicine in this state. Among this number, 97 were graduated from the University of Michigan Medical School, 82 from the Medical Department of Wayne University, and 36 from medical schools outside the state.

* * *

Fifty-four thousand (54,000) watts of electricity were used by the Scientific Exhibitors at the Detroit Convention of the Michigan State Medical Society, in September, 1936. This is equivalent to \$135.00! The total of fifty exhibits was the record number for the State Society.

* * *

"State Society Night" in Ingham County will be held on Tuesday, November, 10, at the Olds Hotel, Lansing. The officers of the Michigan State Medical Society will be honored guests. The speaker of the evening will be Dr. John H. J. Upham of Columbus, Ohio, President-elect of the American Medical Association.

* * *

Four thousand three hundred and eighty-seven (4,387) lines of publicity on the Seventy-first Annual Meeting of the Michigan State Medical Society in Detroit, September 21 to 24, appeared in the *Detroit Free Press*, the *Detroit News*, the *Detroit Times*, and other daily and weekly newspapers of the State of Michigan!

* * *

Dr. Morris Fishbein, editor of *The Journal of the American Medical Association*, writes Secretary Foster of the Michigan State Medical Society: "We are glad to reflect in *The Journal*, advanced medical activities, such as those represented by the Michigan Filter System. Keep us in mind whenever anything new develops."

* * *

"The Filter System," an address by Dr. L. Fernald Foster, Secretary of the Michigan State Medical Society, is on the program of the Annual Conference of Secretaries of Constituent State Medical Associations to be held in Chicago, Monday and Tuesday, November 16 and 17.

All officers and members of the State Society are invited to attend this Conference.

* * *

Beery for Medical Tale—Wallace Beery is by way of stepping out of his accustomed rôles to take part in a picture called "Exposure." It has to do with the American Medical Association and

its activities in discovering quackery in the profession. The regeneration of a young physician is also dealt with. Assurance is given that it will be a distinct departure for Beery, in spite of the wide range of portraits he has supplied.

* * *

The J. F. Hartz Company, Detroit, writes: "We want to congratulate you on the splendid arrangement and exhibits at the recent convention in Detroit. It is our opinion and that of our representatives that it was one of the best which has been staged by the State Society for some time.

"We did some business, met old friends and made some new ones, which, after all, are satisfactory results from the exhibitor's standpoint."

* * *

"**Specialist**" loses his license in Michigan: Dr. W. D. Rea, itinerant "specialist" from Minnesota, who has visited practically all the cities of Michigan during the past few years for a two or three day stay in some hotel, lost his license to practice medicine in the state of Michigan, on October 13, 1936. The Michigan State Board of Registration in Medicine revoked his license on the grounds of running an advertisement in which grossly improbable statements were made.

* * *

Legislative Facts:

Legislature convenes in regular session biennially. Next Regular Session—January, 1937.

The House of Representatives is composed of 100 members.

The Senate is composed of thirty-two members.

The Speaker of the House appoints all House committees.

The President of the Senate appoints all committees in that body.

* * *

Doctor, inquire of the detail men calling upon you monthly if their concerns are, first, advertisers in THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY? Second, did they exhibit at the Annual Meeting of the Michigan State Medical Society in Detroit, last September?

Please refer all detail men to the Executive Office of the Michigan State Medical Society, 2020 Olds Tower, Lansing, so that contacts may be made to gain these friends as advertisers in your JOURNAL and exhibitors at your Annual Convention.

* * *

Do you need a speaker to address your county medical society meeting? If so, contact the Executive Office of the Michigan State Medical Society, 2020 Olds Tower, Lansing. Be sure to indicate the exact date, time, and place of your meetings, subjects desired according to first, second and third choice, and the possible attendance. Please give the committee at least two weeks notice so that the best talent available will be procured for your county medical society; this is not possible on last minute notification.

* * *

Medical supplements in newspapers is a project being worked on by a number of county medical societies in Michigan. The Public Relations Committee recommended that every county society study the possibilities of a medical supplement in a news-

paper of the county, to be published before January 1, 1937; this recommendation was approved by the House of Delegates of the Michigan State Medical Society, September, 1936.

Which county medical society of Michigan will be the first to inaugurate a medical supplement in a local newspaper?

* * *

Orders for the brochure "Who Wants Socialized or State Medicine!" are still coming to the Michigan State Medical Society, for large quantities as well as for individual copies: The Iowa State Medical Society has asked if it could procure 2,500 copies; the Medical Society of the County of Nassau, Mineola, Long Island, has obtained 1,000 copies; the New York State Medical Society has secured 500 copies; the Massachusetts State Medical Society ordered 300 copies; the Michigan State Dental Society, 100 copies.

Both the Tennessee and the Ohio State Medical Associations have reprinted the brochure, almost *in toto* in their journals.

* * *

The Pet Milk Company had an unusual exhibit at the Detroit Convention of the Michigan State Medical Society. Through an error, the description of this beautiful display was omitted from the official program. It is submitted at this tardy date, with apologies:

Pet Milk Company, St. Louis, Missouri.

An actual working model of a milk condensing plant in miniature—every part constructed to scale—was exhibited by Pet Milk Company. It showed the method by which the milk is processed from the time it is received from the farmer until it is sterilized in the can, ready for use.

* * *

Alpha Kappa Kappa.—The first annual meeting of the Michigan Association of the Alpha Kappa Kappa Medical Fraternity was held in the English Grill Room of the Book-Cadillac Hotel, Tuesday evening, September 22, at the time of the Michigan State Medical meeting.

Seventy members enjoyed the banquet and indulged in impromptu speeches afterwards.

The following officers were elected for the ensuing year:

President, Dr. C. S. Tartar (Harvard), Bay City; President-elect, Dr. D. B. Broderson (Michigan), River Rouge; Secretary, Dr. L. Fernald Foster (Pennsylvania), Bay City.

The next meeting will be held in March, 1937, at Detroit.

* * *

"Blood pressure, hot dogs and merry-go-rounds" is the title of a full-page advertisement recently prepared by the W. A. Baum Company, Inc., 460 West 34th Street, New York, for insertion in the medical journals of the United States. It is an exposé of the new charlatan who is taking the place of the old-fashioned medicine man at beach resorts, fairs and amusement parks. "Equipped with a white coat, a stethoscope and a blood pressure instrument," states this unusual advertisement, "these operators are capitalizing on the public's in-

terest in blood pressure. Their main concern is collecting a 10-cent or 15-cent charge 'per patient.'"

This company, along with other business houses which are using their brains and resources to stop medical quackery, are to be commended on their splendid and progressive activity in the interest of better health for the people.

* * *

The Executive Office of the Michigan State Medical Society is *your* office. The staff in the Executive Office at 2020 Olds Tower, Lansing, is maintained to be of service to you. As a member of the Michigan State Medical Society, either directly or through the officers of your county medical society, you may call upon the Executive Office of the Michigan State Medical Society for any service which may aid you in your practice. The scope of the services requested of and performed by the Executive Office appears to be without limitation. Some can be performed quickly—others require a day's time—others have taken as long as two weeks to accomplish the end desired by the individual practitioner.

The officers of the Michigan State Medical Society invite you to utilize the services available to you in your Executive Office in Lansing. The next time you are in the Capital City, drop in and inspect your headquarters and meet the personnel.

* * *

According to the report published October 22, the American College of Surgeons, at its 26th clinical congress in Philadelphia, announced the following hospitals of Detroit and immediate vicinity on the approved list for the training of internes. The list includes the Charles Godwin Jennings Hospital; Chenik Hospital; Children's Hospital of Michigan; Delray General Hospital; East Side General Hospital; Evangelical Deaconess Hospital; Florence Crittenton Hospital; Grace Hospital; Grosse Pointe Hospital; Harper Hospital; Henry Ford Hospital; Herman Kiefer Hospital; Alexander Blain Hospital; Lincoln Hospital; Michigan Mutual Hospital; Parkside Hospital; Providence Hospital; Receiving Hospital; Redford Branch of the Receiving Hospital; St. Joseph's Mercy Hospital; St. Mary's Hospital; Shurly Hospital; United States Marine Hospital; Woman's Hospital; Eloise Hospital and Infirmary; Cottage Hospital, of Grosse Pointe; St. Francis Hospital of Hamtramck; and the Highland Park General Hospital.

* * *

Just to remind you, a list of some of your friends who entered technical exhibits at the Detroit Convention of the Michigan State Medical Society will be published each month in *THE JOURNAL*. Here are ten of the firms which displayed their products at the Michigan State Medical Society Annual Meeting, in September, 1936, for your convenience:

- The Akron Truss Company, Detroit, Michigan.
- A. S. Aloe Company, St. Louis, Missouri.
- The Arlington Chemical Company, Yonkers, New York.
- The Bard-Parker Company, Inc., Danbury, Connecticut.
- Brownie Food Company, Detroit, Michigan.
- The Cilocon Corporation, Detroit, Michigan.
- Coca-Cola Company, Atlanta, Georgia.
- R. B. Davis Company, Hoboken, New Jersey.

DePuy Manufacturing Company, Warsaw, Indiana.
Detroit Dairy & Food Council, Detroit, Michigan.

* * *

Dr. Thomas Parran, Jr., Surgeon General of the U. S. Public Health Service will speak on "Syphilis as a Public Health Problem" at the 16th Annual Public Health Conference of the Michigan Public Health Association. The meeting will be held in the Olds Hotel, Lansing, Wednesday, November 11, 1936, at 2:00 p. m.

"Cancer" will be the subject of another paper at this session. It will be a slide lecture prepared by the Cancer Committee of the Michigan State Medical Society as part of the campaign of cancer education being integrated by the Cancer Committee and Public Relations Committee of the MSMS, with the aid of the Joint Committee on Public Health Education.

Dr. G. M. Byington, Director of Medical Relations for the Detroit Department of Health, is President of the Michigan Public Health Association.

* * *

Space at the State Convention for technical exhibits was made available on last minute arrangements for the Wall Chemicals, Inc., and The Detroit X-Ray Sales Company. Regrettably, this did not allow time for including descriptions of the exhibits in the official program. Brief outlines are presented in this issue on the two attractive displays:

Wall Chemicals, Inc., of Detroit, the only manufacturers of medical gases in Michigan, were represented by an interesting presentation of medical gas cylinders. A great deal of attention was centered in the new Kinet-O-Meter anesthesia machine used by the Company to exhibit its cylinders. Mr. Foster managed the booth.

The Detroit X-ray Sales Company had a fine grouping of shock-proof mobile x-ray equipment and a complete line of accessories. The improved technique slide rules came in for considerable attention. A distribution of bulletins was made on a new line of economical shock-proof diagnostic units. The booth was attended by Mr. L. McAlpine and Mr. O. C. Hamby.

* * *

Wayne Medical School Appointees: Dr. Raymond B. Allan, dean of the Medical Department of the Wayne University, has announced the appointment of four professors to the faculty. The movement to keep up the standards of the school started last spring with the appointment of Dr. Allen as full-time dean. Dr. Charles G. Johnson, formerly of the surgery department of the University of Pennsylvania, has been appointed professor of and head of the department of surgery. He has also received a Public Welfare Commission appointment to be attending surgeon and director of surgery at Receiving Hospital. The professorship in anatomy goes to Dr. Warren O. Nelson, who was assistant professor of anatomy at Yale University, and he will also head that department. Dr. Hugo Freund, now chief of the medical department of Harper Hospital, will be professor of clinical medicine, and the medical director of Children's Hospital, Dr. Thomas B. Cooley, has been appointed professor of pediatrics.

Along with the appointments, two advancements were made at the College. Dr. Ward B. Seelye, who is a chief obstetrician at the Herman Kiefer Hospital and has been professor of obstetrics and gynecology at the College of Medicine, was named head of the department of obstetrics and gynecology. Dr.

Gordon B. Myers was advanced to the professorship of medicine and also head of that department. He has been for two years in charge of medical students at Receiving Hospital.

* * *

The Henchmen O' Clan Campbell assembled for dinner, September 23, at the Book-Cadillac, during the session of the State Society to do honor to their Chief.

Dr. Don has had many assistants during the years he has practiced his profession, and on this occasion, fifteen of them met with their Chief.

Dr. Robert Fraser, dean of the assistants, came from Port Huron to speak words of appreciation. Dr. John McRae of Grand Rapids was there, as were Drs. Don M. Howell of Alma, Ralph Ferris of Birmingham, and the Detroit contingent consisting of Duncan A. Campbell, J. M. Carter, Don Cohoe, William Fenner, Mac. D. Campbell, William S. Summers, John E. Pittman, Wesley Wilson, F. E. Bowman, Max Wainger, and J. M. Robb.

The boys—their persons bedecked w' tartan neckties of the Campbell stripe—in addition to doing justice to the menu, sang lustily to the accompaniment o' the pipes, "The Campbells Are Comin'."

During the evening Dr. Don was presented with a picture of his one-time college professor, Dr. Joseph Bell of Edinburgh, Scotland, Dr. Robb making the presentation as well as acting as toastmaster for the occasion. Dr. Bell was a man of most uncanny diagnostic acumen and so impressed one of his pupils, Conan Doyle, that Sherlock Holmes evolved in fiction.

Dr. Campbell is a Licentiate of the Royal College of Surgeons of Edinburgh, obtaining his degree in 1886, two years before the coming to the college of Conan Doyle.

All in all, this was an occasion long to be remembered by those in attendance.

* * *

Chiropractors Curbed

The State of California licenses 10,859 doctors of medicine, 3,375 chiropractors. One out of five of the world's chiropractors presumably practices in California. This summer, San Francisco's M. (for Michael), Jas. (for James), McGranaghan (for McGranahan) was, therefore, gambling the future of a large section of his profession when he went to court to compel a decision on what a California chiropractor might and might not do to another Californian's body.

One side of Michael McGranaghan's business card says *M. James McGranaghan, Chiropractor*. On the other side it reads *M. Jas. McGranaghan, Attorney at Law*. He practices law from 9 to 12 every morning, chiropractic from 2 to 6 each afternoon, will take a case involving either profession at any hour. When he stops being a lawyer he lays aside his cigar, steps back of a curtain, puts on a black dressing gown edged with white.

Lawyer McGranaghan believed that Chiropractor McGranaghan's license to practice chiropractic permitted him to do practically everything to the human body except dose it with drugs or alter it by major surgery. To establish this belief in law, Chiropractor McGranaghan, having pretended he was sick, sued another friendly chiropractor, Dora Berger, for refusing to give him anything more than spinal adjustment within the letter of the law. Chiropractor Berger behaved properly, decided the court, ruling against Chiropractor-Patient McGranaghan. Lawyer McGranaghan appealed.

Last week, California's Superior Judge John J. Van Nostrand upheld the lower court. California

chiropractors, declared he, have "no legal right to perform an operation upon the teeth of a patient or treat the eyes; no right to administer or prescribe medicines or drug. While x-ray may be included for diagnosis or analysis, it cannot be used in the treatment of disease or illness. Such appliances or agencies as the chiropractic tables, hammer, towels or other instrumentalities which are clearly sanitary do not violate the statute, but the use of various therapeutic agencies, such as electrotherapy, are embraced in the practice of medicine and, therefore, are forbidden to chiropractors."

In effect, Judge Van Nostrand told Lawyer McGranaghan that Chiropractor McGranaghan and his 3,374 California colleagues must stick strictly to manipulating spines. Pleased were all U. S. physicians and osteopaths.—From *Time*, October 12, 1936.

* * *

The eleventh annual one-day clinic of the Highland Park Physicians' Club will be held on December 2, 1936, at the Nurses' Home of the Highland Park General Hospital.

Beginning at 8:30 A. M., the program will be: "The Pathology of Cancer of the Cervix Uteri," by James E. Davis, M.D., Professor of Pathology, Wayne University Medical School; "General Discussion of Vascular Lesions as seen in the Fundus of the Eye," by Arthur J. Bedell, M.D., F.A.C.S., formerly Head of the Department of Ophthalmology, Medical Department of Union University, Albany, N. Y.; "The Mineral and Vitamin Requirements of the Child," by Frederick F. Tisdall, M.D., F.R.C.P., Associate in Pediatrics, University of Toronto; "Clinical Observations on Grippe"—a study of more than 1,000 cases seen in private practice, by C. Anderson Aldrich, M.D., Associate in Pediatrics, Northwestern University Medical School; "Indications for Cesarean Section," by Louis J. Harris, M.A., M.D., Toronto, Canada; "The Treatment of Bladder Neck Obstruction by Means of Transurethral Resection," by Herman Kretschmer, M.D., Chicago, Illinois; "Acute Pancreatitis," by Dean D. Lewis, M.D., F.A.C.S., Professor of Surgery, Johns Hopkins University, Baltimore, Maryland; "The Thyroid Gland," by George Crile, M.D., F.A.C.S., Cleveland, Ohio; "Iodine as Related to Thyroid Disease," by George M. Curtis, M.D., Professor of Surgery, Ohio State University, Columbus, Ohio.

Luncheon will be given at the hospital through the courtesy of the management. In the evening at 7 o'clock there will be an informal banquet at the Book-Cadillac Hotel, following which Dr. George Crile will speak on his recent African Research Expedition, and the talk will be illustrated with moving pictures of his travels. The dinner at night and the ensuing program will be for all doctors, their wives and friends.

During the day the ladies and wives will enroll at 10 A. M. at the Nurses' Home of the Highland Park General Hospital. Arrangements have been made for their party to visit the Rotunda of the Ford Motor Co., lunch at Dearborn Inn, and the afternoon will be taken up with a trip through Greenfield Village.

All of the Detroit ladies who are planning to attend are asked to communicate their desire to Mrs. T. G. Amos, 1557 Edison Ave., Detroit, Michigan, before November 20, as Mrs. Amos is in charge of the ladies committee and would appreciate an early intimation from the ladies who contemplate spending the day here.

All doctors who can do so are urged to attend as the program is sufficient evidence of the substance of the papers.

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column and this will be deemed by us a full compensation to those sending them. A selection will be made for review, as expedient.

RECENT ADVANCES IN GENITO-URINARY SURGERY. By Hamilton Bailey, F.R.C.S. (Eng.), Surgeon, Royal Northern Hospital; Surgeon and Urologist, Essex County Council; Consulting Surgeon, Clacton Hospital; Contributor to the Genito-Urinary Surgery, Medical Annual, since 1933; and Norman M. Matheson, M.B., F.R.C.S., Surgeon, Central Middlesex County Hospital; with 89 illustrations. Philadelphia: P. Blakiston's Son & Co., Inc., 1012 Walnut Street, 1936.

In this work the authors have discussed the "recent advances" made in medical science as it touches the field of genito-urinary medicine. Much, of necessity, has been included that is not strictly new. The subject-matter has, however, been presented in a very readable manner. The subject of excretory urography is covered, giving its value, not only as a method of outlining the urinary organs, but its value as a measure of the function of the kidney is given. Acute infections of the kidney are discussed and the value of urinary antiseptics, especially such new ones as sodium mandelate, and the ketogenic diet, is given.

There is much of value in this, especially for the general practitioner, who does not see the current literature covering this subject.

ARTHRITIS AND RHEUMATIC DISEASE. By Maurice F. Lautman, M.D., Consultant to the United States Public Health Service, Clinic, and Director of the Department for the Study of Arthritis, Levi Memorial Hospital, Hot Springs, Arkansas; with a foreword by Morris Fishbein, M.D., Editor of the Journal of the American Medical Association. New York and Whittlesly House, London: McGraw-Hill Book Company, Inc., 1936. Price, \$2.00.

Dr. Lautman has given a clear non-technical account of arthritis which, in its varying degrees of severity, constitutes a goodly number of cases that demand the attention of the medical practitioner. While the book is written down to the intelligent layman, it will afford a couple of evenings interesting reading for the physician as well. The contents of approximately 180 pages discuss the disease in all its aspects, cause, symptoms, focal infection, the mental aspects, the treatment, rest, diet. Much emphasis is placed upon the importance of recognizing the pre-arthritis state when treatment is more or less effective. The author very wisely warns against self-medication. Medical treatment is a matter to be undertaken only by a physician. The chapter on diet deals with the subject in a general way, for lay reading. In the matter of weight reduction the instructions should be more specific. The illustrations, particularly of physical methods, are sufficiently descriptive. The few radiographs of bone pathology would be much improved with more care in technical production.

PRINCIPALS AND PRACTICE OF RECREATIONAL THERAPY FOR THE MENTALLY ILL. By John Eisele Davis, B.A., M.A. Senior Physical Director, Veterans Administration Facility, Perry Point, Maryland; Fellow of The American Physical Education Association, in collaboration with Dr. William Rush Dunton, Jr., Editor of "Occupational Therapy and Rehabilitation," Instructor in Psychiatry, The Johns Hopkins University, formerly President of The American Occupational Therapy Association, New York. A. S. Barnes and Company, Incorporated, 1936.

The authors are endeavoring to present a theory and practice of recreational therapy practicable for the distinctive needs of the mentally ill. They believe that experience has shown that a recreational

program will provoke responses of both active and passive character and that a therapeutic response may be attained in the psychotic patient.

They have attempted to correlate their experience and to give detailed information and methods of procedure so as to enable the therapist to organize and carry out a satisfactory routine.

There is much of value for those who are attempting to treat this type of patient.

PEDIATRIC NURSING. By John Zahorsky, A.B., M.D., F.A.C.P., Professor of Pediatrics and Director of the Department of Pediatrics, St. Louis University School of Medicine; and Pediatrician-in-Chief to the St. Mary's group of hospitals; Fellow of the American Academy of Pediatrics. Assisted by Beryl E. Hamilton, R.N., Graduate of St. Luke's Hospital, St. Louis. With 144 illustrations in the text and 7 color plates. St. Louis: The C. V. Mosby Company, 1936.

In this work the various disease states as seen in the infant and child are taken up in order. Each condition is discussed from the point of view of the nurse; yet so much is given under each subject that one wonders if such a complete knowledge is not the compelling force that causes the nurse to attempt diagnosis and to suggest treatment in many cases, even though against this she is frequently cautioned in the text. In the second part of the work, practical phases of pediatric nursing are given such detailed description that nothing seems to have been omitted. Various methods of procedure are discussed and illustrated. The technic of the operation of the nursery, the milk laboratory, the infant ward and the contagious ward in the hospital are fully given. Nursing procedures as they must be conducted in the home are detailed. A special chapter on orthopedic nursing is included. The relation of the family to problem of nursing the sick child and child psychology are outlined. Much of pediatric treatment as it applies to the detail to be carried out by the mother or nurse is found in this work. To the physician whose practice is largely confined to the home care of patients, this work will be of great value.

ALLERGY OF THE NOSE AND PARANASAL SINUSES. A MONOGRAPH ON THE SUBJECT AS RELATED TO OTOLARYNGOLOGY. By French K. Hansel, M.D., M.S., Assistant Professor of Clinical Otolaryngology, Washington University School of Medicine; Fellow of the Association for the Study of Allergy, the Association of Resident and Ex-resident Physicians of the Mayo Clinic, the American Laryngological, Rhinological and Otolaryngological Society, and the American Academy of Ophthalmology and Otolaryngology. With 58 text illustrations and 3 color plates. St. Louis: The C. V. Mosby Company, 1936.

This is an exhaustive monograph, written to acquaint the otolaryngologist with the clinical features of allergy as it pertains to his field and to point out the relation of other allergic manifestations. The subject is approached by first considering the physiology, bio-chemistry and bacteriology of the secretions of the nose and paranasal sinuses and the reaction of the cells lining these cavities to allergy and infection.

The author gives in detail the methods of testing and of selecting the materials with which to test for allergy, yet makes it clear that a careful and complete clinical history is of primary importance. This should develop any possible history of contact with allergens, as well as a history of familial allergic predispositions. The clinical manifestations of nasal allergy are discussed and their possible relation to other symptoms, such as headache, asthma, eczema, urticaria, erythema multiforme, angio-neurotic edema, etc., is considered. Especial attention is given to hay-fever. The subject of pollens from various sources is given consideration, not only

from the geographical point of view, but from the botanical as well. Many grasses and weeds are pictured to aid in their identification.

THE HUMAN FOOT, ITS EVOLUTION, PHYSIOLOGY AND FUNCTIONAL DISORDERS. By Dudley J. Morton, Associate Professor of Anatomy, College of Physicians and Surgeons, Columbia University. 244 pages, 100 figures. Columbia University Press, 1935. \$3.00.

This work is a welcome aid to an understanding of both the abnormal and normal foot. The author, who is an orthopedic surgeon, anthropologist and anatomist, devotes nearly a hundred pages to an enthralling story of the evolutionary changes in adaptation and structure of the foot. He shows convincingly that the foot must be regarded as a structure which has been changed, moulded and modified to meet the demands of both four-footed and bipedal locomotion. The human foot, both in its development of an effective mechanism for weight bearing and locomotion and in its weaknesses, is a resultant of evolutionary processes. The weaknesses of the foot, except for paralytic changes, center not on the musculature as commonly supposed, but on the skeletal framework. Most of the foot defects, such as metatarsalgia, so-called "flat feet," etc., are dependent on structural variations associated with the first metatarsal segment: short first metatarsal bone, posteriorly displaced sesamoid bones, hypermobility of the first metatarsal or various combinations of these factors. The author gives both anatomical and physiological evidence to emphasize the non-existence of the "anterior metatarsal arch." There is one functional arch—the longitudinal arch—and the bulk of defects are due to the improper distribution of stresses in the anterior metatarsal element of the longitudinal arch causing imbalance, pronation and other gross defects. Morton emphasizes, however, that "the primary structural factors alone are not sufficient to produce symptomatic disorder; their influence must be supplemented by function as the exciting cause." He points out further that "functional foot disorders do not begin simultaneously with the onset of symptoms, disorder in the foot's mechanism has already existed for a long time, possibly since infancy, while subjective symptoms dignify the transition of a painless disorder into a painful one." For determining structural defects, the use of the x-ray is of the greatest importance.

Morton deals adequately with the diagnosis and treatment of foot defects. A section of the work is devoted to the functional analysis of mechanical stress affecting the foot in locomotion and stance. The work is a significant advance in our knowledge of both the abnormal and the normal foot.

DISEASES OF THE AIR AND FOOD PASSAGES OF FOREIGN-BODY ORIGIN. By Chevalier Jackson, M.D., Sc.D., F.A.C.S., LL.D., Professor of Bronchscopy and Esophagoscopy, Temple University, and Chevalier L. Jackson, A.B., M.D., M.Sc. (Mee.), F.A.C.S., Professor of Clinical Bronchscopy and Esophagoscopy, Temple University. 994 pages with 2,000 illustrations, including 3 plates in colors. Philadelphia and London: W. B. Saunders Company, 1936. Cloth, \$12.50 net.

This is a most unique book. Chevalier Jackson's work has been well known for a long time. His skill in the use of the bronchoscope and the esophagoscope is unsurpassed. *Diseases of the Air and Food Passages of Foreign-Body Origin* is the result of many requests from members of the profession for a book embodying the great mass of clinical facts resulting from Chevalier Jackson's work and observations. He has produced a book in which every-

one engaged in the practice of medicine will be interested. It is divided into two parts; the first deals with the etiology of foreign bodies in the air and food passages followed by a chapter on prophylaxis. Then we have a description of the pathology caused by foreign body irritation, methods of diagnosis, treatment, the mechanical problems involved in removing foreign bodies, and a chapter on prognosis. The second part of the work consists of 600 pages of tabulated information as well as photographs of various foreign bodies met with. The book is the most profusely illustrated book we have ever seen.

PRINCIPLES OF BIOCHEMISTRY. By Albert P. Mathews, Andrew Carnegie Professor of Biochemistry, University of Cincinnati, Cincinnati, Ohio. Baltimore, William Wood & Company. 1936. Price, \$4.50.

The science of biochemistry is one of the most basic to the science of medicine and surgery, if the term "basic" will admit of comparison. Biochemistry is the chemistry of living things. The author of this work has been teaching the subject to students of medicine for about forty years. He is well known for his textbook on physiological chemistry. The present book, however, is entirely new, somewhat different, and is intended for colleges in which the larger work is not suited, owing to its greater length. *Principles of Biochemistry* is five hundred pages in length; it deals in a clear and concise way with the essentials of the subject. It is largely descriptive in its treatment, and therefore will appeal to physicians who wish to brush up on any of the various subjects included in the general title of the work. In his book, the author has endeavored to correlate and to synthesize the numerous facts as a part of the great science which reveals the finer structure and coordinated chemistry of the human body. The work undoubtedly will be welcomed as a textbook on the subject. It is here recommended to the physician no matter what his specialty is, who desires to review this important subject.

A TEXTBOOK OF PATHOLOGY. By W. G. MacCallum, Professor of Pathology and Bacteriology, The Johns Hopkins University, Baltimore. Sixth Edition, Entirely Reset. 1,277 pages with 697 illustrations. Philadelphia and London: W. B. Saunders Company, 1936. Cloth, \$10.00 net.

It is two decades since the first edition of this work appeared. It is, therefore, too well known to the medical profession to require a lengthy introduction. The fact that it has gone through six editions is evidence that the author has always kept it abreast with the progressive development of the science of pathology. The present revision deals fully with such subjects as endocrine disturbances, vitamin deficiencies and virus infections, fields in which great advances have been made during the past few years. The principle of treatment of the subject of pathology has been to begin with the cause of disease and to describe its effects throughout the human body rather than with each organ separately. The author assumes that, as he says, "all departures from normal health are brought about by some harmful or disturbing agency. The endeavor has been made to trace these changes back to their cause and then to describe not only the anatomical alterations, but the disturbances of function and the reaction which tends to restore the body to a normal state and even to establish a protection against a recurrence of the same injury." The relation between pathology and clinical medicine is very close, a fact which is emphasized by the author's treatment of his subject. The work is extensively illustrated. Its popularity will extend with this sixth edition.

PROCEEDINGS OF HOUSE OF DELEGATES—1936

TABLE OF CONTENTS

		Introduction of Business	Reference Committee Reports
		Page	Page
I.	Record of Attendance.....	729	
II.	Appointment of Reference Committees.....	729	
III.	Speaker's Address	730	751
IV.	President's Address	731	751
V.	President-Elect's Address	732	751
VI.	Annual Report of the Council.....	733	750
VII.	Report of Delegates to A. M. A.....	737	751
VIII.	Proposed Amendments to Constitution and By-Laws:		
	1. County Society Committee on Legislation and Public Relations	738	758
	2. Creation of Standing Committee on Postgraduate Education	738	758
	3. Proposing Speaker of the House as Member of the Council	739	760
	4. Secretary and Executive Secretary.....	739	758
IX.	Reports of Standing Committees:		
	1. Legislative Committee	739	748 751
	2. M. S. M. S. Representatives to the Joint Committee on Public Health Education.....	741	749
	3. Medical Economics Committee.....	741	748 752
	(a) Subcommittee on Postgraduate Courses for General Practitioners	741	752
	(b) Subcommittee on Industrial Medicine.....	742	752
	(c) Subcommittee on Group Hospitalization.....	742	
	(d) Subcommittee on Relief Medicine.....	742	752
	(e) Subcommittee on Insurance Examinations.....	743	752
	4. Cancer Committee	741	749
	5. Preventive Medicine Committee.....	741	749
X.	Reports of Special Committees:		
	1. Public Relations Committee.....	743	757
	2. Maternal Health Committee.....	743	757
	3. Radio Committee	743	757
	4. Advisory Committee, Woman's Auxiliary.....	743	757
	5. Liaison Committee with Hospital Association.....	743	757
	6. Liaison Committee with State Bar of Michigan.....	743	758
	7. Liaison Committee with Dentists, Nurses and Pharmacists	744	758
	8. Medico-legal Study Committee.....	744	751
	9. Iodized Salt Committee.....	744	757
	10. Advisory Committee on Postgraduate Education.....	745	757
	11. Committee to Study Fee Schedules A, B, C, D.....	745	
	12. Mental Hygiene Committee.....		757
	13. Contact Committee to Governmental Agencies.....		758
XI.	Resolutions and New Business:		
	1. Emeritus Membership	746	761
	2. Qualification for Hospital Staff Membership.....	747	
	3. Medical Examiner System in Michigan.....	747	761
	4. Committee Activities	747	761
	5. Crippled Children Commission.....	747	761
	6. Amendment to By-laws re Committee on Ethics.....	747	760
	7. Standards for Interne Training.....	748	761
	8. Lectures by Physicians on Social Hygiene.....	748	761
	9. Co-operation from Governmental Agencies.....	748	762
	10. Amendment to By-laws re Public Relations Committee..	748	760
XII.	Reports of Reference Committees:		
	1. Standing Committees		748 751
	2. Officers' Reports		748 751
	3. Report of the Council.....		750
	4. Reports of Special Committees.....		757
	5. Reference Committee on Amendments to Constitution and By-laws		758 761
	6. Reference Committee on Resolutions.....		
XIII.	Message to and from Dr. B. R. Corbus.....	750	764
XIV.	Resolution on Death of Dr. Carl F. Moll.....	750	762
XV.	Transfer of Hillsdale County from Second to Third Councilor District	750	
XVI.	Announcement re the 122 Exhibits, and Invitational Golf.....	751	
XVII.	Election of Officers and Place of Annual Meeting:		
	1. Councilor for First District.....	762	
	2. Councilor for Fourth District.....	762	
	3. Councilor for Fifth District.....	763	
	4. Councilor for Sixth District.....	763	
	5. Councilor for Eleventh District.....	763	
	6. Delegates to A. M. A.....	763	
	7. Alternate Delegates to A. M. A.....	765	
	8. Place of Annual Meeting.....	766	
	9. President-Elect	766	
	10. Speaker of House of Delegates.....	767	
	11. Vice-Speaker of House of Delegates.....	767	
XVIII.	Adjournment	768	

MICHIGAN STATE MEDICAL SOCIETY

SEVENTY-FIRST ANNUAL MEETING

Proceedings of House of Delegates

Book-Cadillac Hotel, Detroit, Michigan

September 21-22, 1936

Monday Morning Session

September 21, 1936

The opening session of the meeting of the House of Delegates of the Michigan State Medical Society, held in the Ballroom of the Book-Cadillac Hotel, Detroit, Michigan, convened at 9:30 o'clock, Dr. Frank Reeder, of Flint, Michigan, Speaker of the House, presiding.

THE SPEAKER: The time has arrived for the calling of this meeting. All those Delegates who have up to this time been approved will please come forward and take the front seats.

DR. A. G. SHEETS (Eaton): I wish to announce at this time that there is a quorum registered.

THE SECRETARY (Dr. C. T. Ekelund): Mr. Speaker, I hold in my hand the roll of the Credentials Committee, comprising fifty-nine accredited delegates, which constitutes a quorum. If some member of the House will move that this constitutes the roll of the House for the morning session, we shall proceed.

DR. L. O. GEIB (Wayne): I so move.

The motion was seconded, voted upon, and carried. Following is the roll of the House for the three sessions:

I. RECORD OF ATTENDANCE

(From Report of the Committee on Credentials)

COUNTY	DELEGATE	Sessions		
		1st	2nd	3rd
1. Allegan	Dr. Wilbur C. Medill	x	x	x
2. Alpena-Alcona-Presque Isle	Dr. F. J. O'Donnell	x	-	-
3. Barry	Dr. R. B. Harkness	x	-	x
4. Bay	Dr. L. Fernald Foster	x	x	x
5. Berrien	Dr. R. Snowden	x	-	-
6. Branch	Dr. R. L. Wade	x	x	x
7. Calhoun	Dr. Harvey Hansen	x	x	x
	Dr. A. T. Hafford	x	x	x
8. Cass	Dr. W. C. McCutcheon	x	x	x
9. Chippewa-Mackinac	Dr. J. G. Blain	x	x	x
10. Clinton	Dr. Dean W. Hart	x	x	x
11. Delta	(Not represented)			
12. Dickinson-Iron	Dr. E. M. Libby	-	x	x
13. Eaton	Dr. A. G. Sheets	x	x	x
14. Genesee	Dr. F. E. Reeder	x	x	x
	Dr. George Curry	x	x	x
	Dr. Donald Brasie	x	x	x
	(Not represented)			
15. Gogebic				
16. Grand Traverse-Leelanau-Benzie	Dr. E. F. Sladek	x	x	x
17. Gratiot-Isabella-Clare	Dr. M. G. Becker	x	x	x
18. Hillsdale	Dr. O. G. McFarland	x	-	-
19. Houghton-Baraga-Keweenaw	Dr. G. C. Stewart	-	-	x
20. Huron-Sanilac	Dr. D. D. McNaughton	-	x	x
21. Ingham	Dr. L. G. Christian	x	x	x
	Dr. C. F. DeVries	x	x	x
	Dr. H. V. Wiley	x	x	x
22. Ionia-Montcalm	Dr. E. H. Ferguson	x	x	x
23. Jackson	Dr. P. A. Riley	x	x	x
	Dr. J. J. O'Meara	x	x	x
24. Kalamazoo-VanBuren	Dr. F. T. Andrews	x	x	x
	Dr. R. G. Cook	x	x	x
	Dr. Chas. TenHouten	-	x	x
25. Kent	Dr. Leon Sevey	x	x	x
	Dr. W. R. Torgerson	x	x	x
	Dr. A. V. Wenger	x	x	x
	Dr. C. F. Snapp	x	x	x
	Dr. J. D. Brook	x	-	-

COUNTY	DELEGATE	Sessions		
		1st	2nd	3rd
26. Lapeer	Dr. D. J. O'Brien	x	x	x
27. Lenawee	Dr. A. W. Chase	-	-	x
28. Livingston	Dr. H. G. Huntington	x	x	x
29. Luce	(Not represented)			
30. Macomb	Dr. A. B. Bower	-	x	x
31. Manistee	Dr. K. M. Bryan	x	x	x
32. Marquette-Alger	Dr. V. Vandeventer	x	x	x
33. Mason	(Not represented)			
34. Mecosta-Osceola	Dr. G. H. Yeo	x	x	x
35. Menominee	Dr. S. C. Mason	x	x	x
36. Midland	Dr. R. E. Rice	-	-	x
37. Monroe	Dr. Dean Denman	-	-	x
38. Muskegon	Dr. R. H. Holmes	x	x	x
39. Newaygo	Dr. O. D. Stryker	x	x	x
40. Northern Michigan	(Not represented)			
41. Oakland	Dr. Otto Beck	x	x	x
	Dr. Ernest Bauer	x	x	x
42. Oceana	Dr. W. Lemke	x	-	x
43. O. M. C. O. R. O.	Dr. C. R. Keyport	x	x	x
44. Ontonagon	(Not represented)			
45. Ottawa	Dr. E. A. Stickley	x	x	x
46. Saginaw	Dr. Ralph Jiroch	x	x	x
	Dr. C. E. Toshach	x	-	-
47. St. Clair	Dr. A. L. Callery	x	x	x
48. St. Joseph	Dr. R. A. Springer	x	x	x
49. Schoolcraft	(Not represented)			
50. Shiawassee	Dr. I. W. Greene	x	x	x
51. Tuscola	Dr. O. G. Johnson	-	-	x
52. Washtenaw	Dr. John Sundwall	x	x	x
	Dr. Dean Myers	x	x	x
	Dr. John Wessinger	x	x	x
53. Wayne	Dr. W. D. Barrett	x	-	x
	Dr. F. B. Burke	x	x	-
	Dr. W. J. Cassidy	x	x	x
	Dr. A. E. Catherwood	x	x	x
	Dr. J. L. Chester	x	x	x
	Dr. W. R. Clinton	x	x	-
	Dr. B. L. Connolly	x	x	x
	Dr. Douglas Donald	x	x	x
	Dr. C. E. Dutchess	x	x	x
	Dr. L. O. Geib	x	x	x
	Dr. T. K. Gruber	x	x	x
	Dr. C. K. Hasley	x	x	x
	Dr. L. T. Henderson	x	x	x
	Dr. L. J. Hirschman	x	x	x
	Dr. S. W. Insley	x	x	x
	Dr. R. C. Jamieson	x	x	x
	Dr. C. R. Kennedy	x	x	x
	Dr. P. L. Ledwidge	x	x	x
	Dr. H. A. Luce	x	x	x
	Dr. R. H. Pino	x	x	x
	Dr. H. W. Plaggemeyer	x	x	x
	Dr. W. S. Reveno	x	x	x
	Dr. J. M. Robb	x	x	-
	Dr. E. D. Spalding	x	x	x
	Dr. W. J. Stapleton, Jr.	x	x	x
	Dr. C. E. Umphrey	x	-	x
	Dr. H. W. Yates	x	x	x
	Dr. A. P. Biddle	x	x	x
54. Wexford	Dr. W. Joe Smith	x	-	x

THE SPEAKER: Over sixty have been properly approved. I therefore declare this meeting to be in session. We shall proceed by way of a few preliminary announcements. First it is necessary to have a Sergeant-at-Arms, and I very gladly honor and ask Dr. James J. O'Meara to serve as Sergeant-at-Arms. (Applause)

Then I desire, at this time, to make known to the assembly the Committee who will serve as censors for the release of news to the press. That Committee will consist of the President, the Chairman of the Council, the Secretary, and the Speaker.

II. APPOINTMENT OF REFERENCE COMMITTEES

As you know, the Reference Committees are rather large because there is a voluminous amount of work to be done, and at this time I would like

the Chairmen of the various Reference Committees to come before the Speakers' stand as I call their names: Dr. George Curry, Dr. Stanley W. Insley, Dr. Roy H. Holmes, Dr. L. G. Christian, Dr. W. R. Torgerson, Dr. L. F. Foster.

Gentlemen, I have asked you to come forward so that the various committeemen may be able to recognize you. These committees have become so large that up until the time you are ready to go into session they do not know their respective Chairmen.

The Vice Speaker, Dr. Philip A. Riley, of Jackson, took the Chair.

VICE SPEAKER RILEY: The next order of business will be the Speaker's address, by Dr. Reeder, of Flint.

III. SPEAKER'S ADDRESS

In this brief message I desire to speak to you as delegate to delegate. May I say in the beginning, as your representative on the Council, that if effort, energy and loss of time in the line of duty at a sacrifice, means criticism of the Executive Committee of the Council during the past year, then that criticism can only be words of praise. Surely the members of the Council, with slight exception, so far as I know, have done all in their power to aid the officers of the State Society and to meet the demands of the House of Delegates. All through the year they have worked under the able leadership of Dr. Henry Cook, who at all times asked advice and assistance from many of you who sit in this assembly today.

Now if I were able to preach to you and attempt, as preachers say, "To save your souls in five minutes," I would select as my Bible the Constitution and By-Laws of the Michigan State Medical Society and would select for my text from the Constitution a part of Article 2, Section 1, which reads:

"The purposes of this Society are to promote the science and art of medicine, the protection of public health and the betterment of the medical profession."

This text is further substantiated and clarified in its relation to the House of Delegates when, in the By-Laws, Section 7 (b) and (c), it reads as follows:

"The House of Delegates shall concern itself and advise as to the interests of the profession and of the public in those matters of legislation pertaining to medical education, medical registration, medical laws and public health, and it shall be active in the education of the public in regard to medical research and scientific medicine."

These are the duties of this legislative body and how may it become more efficient? What are and when are the duties of the individual delegate finished?

President Penberthy has appealed to the County Societies to choose officers who will work and create enthusiasm among their members toward the need and value of organized medicine, and not men because of age, popularity or good-fellowship.

It is the opinion of the Speaker that the same holds true in the selection of delegates, that they be gradually educated into the requirements of their duties as stated in the text, that they be chosen for periods of one, two and three years, that every County Society elect its delegates within thirty or sixty days following the annual meeting in order that they may know they are assuming a responsibility and will interest themselves in reading the JOURNAL and familiarize themselves throughout the year with the proceedings of the Council and the Standing Committees, and come to these several sessions better prepared to serve in the various capacities.

The Speaker also believes that a more direct contact between the Council and the parent Association in sending the Chairman of the Council to the A. M. A. meeting annually, would bring valuable aid to the Council, hence to the County Societies through the Councilors. I am hoping for some legislation along this line in the near future.

Again, I believe you all agree that the greatest advancement in our history is the founding of Post-Graduate Medical Education. It has done more toward harmony among and appreciation of our profession than any methods heretofore advanced, and I feel this assembly should stand back of it and further it more and more, even though we have today the best program of Post-Graduate Medical Education of any state in the Union. Would it not be advisable in our medical schools to teach the student the value of organized medicine, also drive it home in our post-graduate courses?

Again, I feel that our legislation should at no time be antagonistic to our State or Federal Government, but, as we become dissatisfied because of lack of lay knowledge of our science, we should make every effort to aid our Government both to the satisfaction of the public and ourselves. When Government learns to understand us, the more will it listen to our appeals and the more it will know that never can that age old truth of personal and confidential relationship of patient to physician be taken away.

We feel that we have a good organization. We have, but we are far from reaching our ideal. There remain too many without the fold, either because as young men they were not fostered properly, or, in later years, were allowed to fall by the wayside. I am sure the time must come when in order to provide better doctors to promote medical science and better protect public health and gain more deeply the confidence of our Government and the public, we must have some form of integration, just as it has taken the legal profession years to discover its need.

So much to you as an assembly. What about you as an individual delegate? When is your duty done? Surely not at the close of these sessions as it has been in the past. Were you to be chosen soon after the annual meeting you could and should be of most valuable service throughout the year to the officers of the County Societies, in imparting your knowledge of the activities of the State Society to the members in general, to the State and National Congressmen, to educational groups, to Hospital groups, and so on. There is no limit to the value of your usefulness as a delegate.

In conclusion, I would have you remember that your work is not just for today but that you should be constantly building for the future of our great profession. This thought is beautifully stated in this brief verse:

A BUILDER

An old man traveling a lone highway
Came at the evening cold and gray
To a chasm deep and wide.
The old man crossed in the twilight dim.
For the sullen stream had no fears for him;
But he turned when he reached the other side
And builded a bridge to span the tide.
"Old Man," cried a fellow pilgrim near,
"You are wasting your strength with building here;
Your journey will end with the closing day
And you never again will pass this way.
You have crossed the chasm deep and wide,
Why build you a bridge at eventide?"
And the builder raised his old, gray head,
"Good friend, in the path I have come," he said,
"There followeth after me today
A youth whose feet must pass this way.
This stream, which has been as naught to me
To that fair-headed boy may a pitfall be;
He, too, must cross in the twilight dim—
Good friend, I am building this bridge for him."

My closing thought with you, as the nucleus of our great society, is that you return to your County Society with a message of justice to your State Society, to your profession, to your Government, to the public and then in all sincerity, believing that organized medicine stands for all things that are good for mankind, we can say in the words of Andrew Jackson: "We stand upon the immutable principles of justice and no earthly power can drive us from our position."

(Applause)

VICE SPEAKER RILEY: Thank you, Mr. Speaker. We will refer the Speaker's address to the Committee on Officers' Reports. (See page 751 for report of Reference Committee.)

Dr. Reeder resumed the Chair.

THE SPEAKER: It becomes my pleasure at this time to present one who has given of his best during the past year. I feel that he has more than made good, because all of us who are so thoroughly acquainted with him know that everything he does is right from the heart and perfectly conscientious, and at this time I am pleased to present to you your President, Dr. Grover C. Penberthy.

Those in attendance arose and applauded.

IV. PRESIDENT'S ADDRESS

Mr. Speaker, Officers of the State Society and Members of the House of Delegates:

It is with a feeling of great satisfaction that I am privileged to appear before you on this occasion, the 71st Annual Meeting of the Michigan State Medical Society. You honored me two years ago by making me president-elect and last year upon becoming president I expressed myself as follows: "I am conscious of the honor you have bestowed upon me and all the friendship and confidence demonstrated, but at the same time I am more deeply conscious of the responsibilities which the office entails, and it is my hope that throughout the coming year I shall receive your steadfast loyalty, coöperation and guidance." All that I had hoped for has been realized in more than full measure, for which I feel deeply indebted to you all.

It has been a privilege and a pleasure to have had the opportunity of working with a thinking, constructive group of representative medical men, who realize their collective responsibility, and have played a part in these rapidly changing times, helping to adjust problems which confront us in the practice of medicine. The continuance of the highest standard of medical care for all classes has been foremost in the minds of all. Constructive work has been done and a foundation has been laid by this house of delegates, the officers of the society and the committees. All have given freely of their time and thought, to support and maintain the traditions of the past, and meet the growing needs and the challenge that has been thrust at organized medicine the past years. The medical man must continue to be a leader because of the changed social "set-up" and the advancements made in medical science. To quote Dr. R. R. Smith in his retiring presidential address last year, "We are essentially a scientific body of professional men—and as a group of scientific men we will contribute in every way we can to the elevation of the standards of the practice and will respect the efforts that are being made by the public and our teaching institutions to do the same thing."

The specialization in medical practice may have contributed to the lack of interest on the part of

some to assume leadership and responsibility. This may tend to narrow one's interest and make it difficult to assume leadership in matters that concern the health and welfare of the community. The economic problems which have grown up about us have affected the general public and the profession at large. This requires the profession to have some political interest and activity. It is our responsibility first to aid representatives of government and society to effect an equitable distribution in the cost of illness and a more equitable remuneration to the physician for his services, and secondly to prevent political activity that may develop or encroach upon medical control in the care of the sick.

At the last meeting of this house of delegates you approved of a committee to be known as the Contact Committee to Governmental Agencies. This committee under the chairmanship of Dr. Henry Cook was cordially received and has functioned, as we hope, for the best interest of the profession. The committee received valuable assistance and co-operation from the Probate Judges Association. It may be said that it was the first time a representative group of the profession was asked to meet with representatives of the state administration. No doubt, the activities of our legislative committee laid the foundation and emphasized the need for such a committee.

The activities and work of the many committees which include some 103 members of the State Society, who have worked diligently the past year, will be printed in the JOURNAL or reported to this body.

The Public Relations Committee, a committee you approved of a year ago, has been active in organization work and putting into effect a "filter system." The chairman, Dr. L. F. Foster, and his committee, have done a constructive work, which is history-making and should receive unlimited support from the County Unit Committees.

The Legislative Committee under Dr. Howard Cummings as chairman has carried on a program and developed a basic science law to be presented at the next legislature, which offers to the public, if passed, security and protection from those who will qualify to practice the healing arts. One not acquainted with the work of this committee will never appreciate or realize the time spent and the thought given by the members to formulate this bill, which appears to be complete and shows sound thinking for the protection of the public.

The Public Health Committee with Dr. L. O. Geib as chairman has always engaged in a constructive program; whereas last year they emphasized the care of the tuberculous patient, this year they have concentrated on the problem of medical relief.

The chairman of this committee, Dr. L. O. Geib, has met with other members of the State Society to work in coöperation with the Michigan Department of Health, represented by Doctor Lillian Smith, who has outlined the program for child welfare under the provisions of the Social Securities Act. At the first meeting the program was discussed and at a later date was referred to the Executive Committee of the Council. Those assembled at the first meeting represented the Medical, Dental and Nursing Groups, Crippled Children's Commission, Welfare, Home Economics, Public Instruction and interested lay groups. This group comprises a general advisory committee and will continue to function and guide those directing the Social Security Maternal and Child Health Program. This activity should in no way interfere with the doctor and should in reality aid the doctor in the rural communities, where it is intended that this work should be concentrated. Judging from the report of this work to date almost

100 per cent coöperation has been given by the profession.

The Economics Committee under the chairmanship of Dr. Ralph Pino, and the Subcommittee under Dr. Stanley Insley, have worked on some of the proposed plans and recommendations made by the Economics Committee a year ago. The work of medical relief is one of our big problems and this committee, with the information at hand, will, no doubt, play an active part in assisting the Governor's Committee; which was appointed to make a survey of relief problems and make recommendations for new legislation. This new legislation will in all probability include the recodification of laws affecting the care of afflicted and crippled children and those on relief.

The many activities above mentioned emphasize the continued need for an executive secretary. The reported record shows the part played by our very efficient executive secretary, William J. Burns. He has been a stimulus to officers and committee men, to meet and "carry through" their part of the program. He has contributed much in the interest of organized medicine, and with his knowledge, tact and enthusiasm will continue to contribute, for which I wish to express my personal appreciation. I also wish to thank Dr. C. T. Ekelund for his valuable counsel and interest in the affairs of the society, all of which has helped lessen the burden of responsibility placed upon the officers.

THE JOURNAL, edited by our much revered Dr. J. H. Dempster, should receive the wholehearted support of all members of the society, and all who can should contribute to this publication. We are proud of it, because the editor aims to maintain the highest standard and quality of articles published, and gives thought to the editorials, the historical and other attractive educational features. The question is sometimes asked, "What do we receive from the State Society for the dues paid?" The educational feature of THE JOURNAL, published monthly, should not be overlooked as one of the contributions made by the State Society.

The postgraduate program is an activity of the State Society which has attracted attention and is being copied by other state organizations. This activity has a far-reaching effect and is receiving support from the State Society and the University of Michigan, and from now on will receive support and coöperation from the Medical School of Wayne University. Judging from the attendance the past year, at the various meetings held throughout the State, more physicians are taking advantage of this educational opportunity.

The Cancer Committee, with Dr. O. A. Brines as chairman, has continued to do a constructive work in bringing their program to the public in an educational manner. This outstanding contribution by the profession should be given every support and encouragement.

The Standing Committees have all functioned in a constructive manner, and the newly created committees have outlined programs for the future. It may take time to realize the benefits from their planning and their efforts, but this work is a part of the general program and the committees should be given encouragement to "carry on."

The innovation of having a "State Night" during the year inaugurated by the Jackson County Society under President C. R. Dengler, and followed by Muskegon, Genesee, Washtenaw, Calhoun and Oakland Counties, is commendable, and represents an activity long desired to bring the county units and the State Society closer together. The State Society benefited by this type of meeting. The officers of the society hope that the membership in the county units were as much stimulated by the interest and enthusiasm manifested as were the of-

ficers who attended. Let this type of meeting continue to be a part of the program each year. Perhaps in the future it may be possible for several of the smaller county units to hold joint meetings with the State Society. This type of "get-together" is constructive.

The activities of the Council have been many. The chairman, Dr. Henry Cook, has given unselfishly of his time to this work, no doubt, at a sacrifice of time from his practice. To him I wish to express my deep appreciation for his untiring interest in the affairs of the society and the profession.

This body is assembled to review the work of the year and to outline a program for the future. Because of the support and coöperation given the officers over the past year, I am confident that your deliberations will be for the best interests of the people of Michigan and the medical profession. The State Society has made every effort to fit into the scheme of activities and lend assistance to the allied and other interested groups, in order that we may learn of their problems and in turn they know ours. May even a closer relationship with the various social and welfare agencies be established and function for the best interest of all. Again, I wish to express my thanks and sincere appreciation to all who have contributed to the program of the past year and extend to Doctor Perry and the other incoming officers my best wishes for a successful year and the whole-hearted support and coöperation by the membership of the Society.

(Applause.)

THE SPEAKER: The President's address will be referred to the Reference Committee on Officers' Reports. (See page 751 for report of Reference Committee.)

You have heard from one who has just about finished his course. You are now to hear from one who will guide you in the coming year. I am very happy to present Dr. Henry E. Perry, President-Elect.

Those in attendance arose and applauded.

V. PRESIDENT-ELECT'S ADDRESS

Mr. Speaker, Officers of the State Society, and Members of the House of Delegates:

For the past year I have had the honor of being your president-elect, and in a few days I shall have the greater honor of being your president. This boon from the medical profession I appreciate more than words can tell. During the past twelve months I have attempted to familiarize myself with the duties which go with the presidency. I find there is a tremendous amount of work and responsibility associated with this office. I intend to give it a great deal of my time during the months to come. Each and all of my efforts will be for the furtherance of the interests of the medical profession.

It is my aim and desire to appoint to all standing and special committees, with the advice of the council, members who are vitally interested and who are willing to labor for organized medicine. I hope and believe that the chairmen of all my committees will be active hard-working leaders, as all of the Society's increasingly important business first passes through their hands before it reaches the Council.

The House of Delegates, our governing body, has a great responsibility and a lot of work to do in all too short a time with only one meeting a year. Despite this limitation, it is doing a splendid job.

The year 1937 will be a legislative year in Michi-

gan. I realize the vast amount of work which will be the lot of our Legislative Committee. Therefore I am going to appoint to that Committee men who have had experience in legislative work, who know how and where to make contacts which will bring good results to our Society and men who can be assembled quickly in order to deal with emergencies if and when they arise.

The Public Relations Committee has turned out to be a very busy unit and I feel its personnel should be well scattered over the state. With the work of integration, trouble is liable to spring up at any time or place, and with each committee member covering several counties, the chairman of the Public Relations Committee can refer any "break-down" to the member closest to it and get immediate action.

We physicians must remember first, last and always that we are a body of scientific professional men and women; however, we cannot close our eyes to economics as we and our families must live. No one, not even a philosopher, can do his best work when hungry, and in medicine we are required by an exacting public *always* to be at our best.

Our hundreds of members throughout the state are looking to the Michigan State Medical Society for help in connection with the social aspects of medical practice, as the depression is still with us in certain localities of the state. We shall turn to the Economics Committee, with a confidence that their program of the next twelve months will bring material benefit to the profession of Michigan as a whole as well as to the individual practitioner. I am going to appoint to the Committee on Medical Economics men who know economics and are willing to sacrifice days, even weeks, of their time for the benefit of us all.

We are constantly hearing rumors of socialized or state medicine. We physicians know that such a program would not be good for the public or for the medical profession. Among other things, it would destroy competition which is not alone the life of trade but of medical service as well. I feel that every physician in the state should be and is willing to give a certain percentage of his services to the worthy poor, without thought of recompense. I think we are all willing to take a little loss as we journey along, to insure that everyone in our state receives adequate and good medical service. To the borderline group, we can offer a postpayment plan to aid these people to maintain their own self respect and morale. Thus we will take care of 40 per cent of medical service, as 20 per cent is composed of indigents and another 20 per cent are borderline cases, economically speaking. The remaining 60 per cent are said to be able to pay for services received. In other words, if everyone in our state receives good medical service, and if our state organizations keep alert to the day-dreamers and wishful thinkers, we will never have state medicine.

The officers of the Michigan State Medical Society during the past twelve months have worked hard and efficiently. Dr. Grover C. Penberthy has been a very active president, stimulating the county societies and the committees of the State Society to greater efforts. Dr. C. T. Ekelund has given much time and thought to the office of medical secretary. Mr. Wm. J. Burns, as executive secretary, has brought new life to our state society and to many of the county societies. The purpose of a medical society is to benefit its members, and this year the men throughout the state know that the Michigan State Medical Society is doing just that thing for them.

Dr. L. Fernald Foster, chairman of the Public Relations Committee, has visited practically all counties in the state to instruct and stimulate the handling of the Filter System, which has saved to the

local communities the medical and surgical work required by our afflicted children.

I fully realize the responsibilities which will rest on me during the coming year and respectfully ask your coöperation and advice during that period.
(Applause)

THE SPEAKER: The President-Elect's address will be referred to the Reference Committee on Officers' Reports. (See page 751 for report of Reference Committee.)

Some time ago it was decided by the Executive Committee of the Council and the Officers of the Society to have a guest speaker at this session this morning. So today I am very happy to introduce to you the gentleman who has always been interested in the welfare of the medical profession, Honorable Frank L. McAvinchey, Judge of the Probate Court of Genesee County and Chairman of the Legislative Committee of the Michigan Association of Probate Judges. Judge McAvinchey!

ADDRESS OF HONORABLE FRANK L. McAVINCHEY

(To be published as a special article in
THE JOURNAL)

THE SPEAKER: We shall now proceed with the regular order of business, and the first item is the Annual Report of the Council, by Dr. Henry Cook.

VI. ANNUAL REPORT OF THE COUNCIL

DR. HENRY COOK (Genesee): Mr. Speaker, I would like at this time to take the opportunity of thanking the President of the Society for his kind words in my behalf. I almost thought he was going to nominate me for some office when he made his remarks about the Chairman of the Council, and so informed him.

And I would also like to take the opportunity of thanking the members of his Committees for their work and their coöperation with the Council this year. These remarks are not a part of the Council report; they are personal.

I would like to state that in my opinion there is a change taking place in the attitudes and the activities of the State Society which is fostered more or less by a group who have certain definite ideas as to what the interests of the profession and of the public demand. It is well in an organization that we have members in it who do take sufficient interest in these matters to give them their attention. We sometimes feel—we who are older in the work—that this aggressive group have a motive, or would bring about a condition sometimes which would not be to the interests of the profession. However, it seems to me, that some of us must realize that this group is interested in the same problems as we are, and the only discussion or controversy about it is the method used to gain that end.

Another thing that I am impressed with is this, and I think if we will keep it in mind it gives us assurance, that when this group is given responsibility, the tendency is to become conservative rather than too liberal, and we who have been active can feel sure, and reassured, that the future of the profession and the organization of the State Society is secure, because then they are as equally and as honestly interested as are those who have gone on before. Personally I have the confidence that the future of our Society is assured because of that intense interest and honest intention of all who are working in behalf of the Society.

I don't know whether that has a part in the Council's report, but I did like to put it in because that is an impression which I have gained, and I hope we can all view it in that way.

I now go to the report of the Council.

Report of the Council

The regular Mid-winter meeting of The Council was held in Detroit on January 15-16, 1936. In addition, twelve meetings of the Executive Committee of The Council were held since the last Annual Meeting of the Michigan State Medical Society.

Various items of the growing business of the State Society and its 27 committees were considered at these meetings, and many important decisions had to be made during this year. The Executive Committee of six members has endeavored to keep in mind the attitudes and opinions of all groups in the profession and to make decisions in accordance with their desires. The Executive Committee has made every effort to keep other members of The Council, the officers and the membership fully informed concerning problems as they have arisen and with decisions made, using correspondence, minutes and THE JOURNAL.

Effort has been made also to integrate in the State Society confidential news releases to familiarize members of the component county societies with the activities of the State Society and thereby develop better cooperation and a more effective, stronger organization.

Membership

On January 1, 1936, members in good standing totaled 3,650, a gain of 257 members over the previous year. As of September 20, 1936, the paid-up membership is exactly 3,625, an increase of 127 as of the same date in 1935.

Finances

The official audit at the close of the year 1935 showed a Present Worth of \$15,567.11. This represents a most satisfactory increase over the Present Worth of the previous year which was \$12,207.91. The Society's cash on hand as of September 15, 1936, was \$16,534.10; last year on the same date it was \$10,932.06. The bonds of the Michigan State Medical Society are in favorable position and have done very well, especially when one considers the sad personal experiences of many individuals who were in the bond market during the past six or seven years. The Officers of the State Society who in the past selected these bonds are to be congratulated and thanked.

The Journal

The Council feels that the membership has more reason to feel proud of THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY now than it ever had. It has been augmented and beautified during the past year, and will be further enhanced as the revenue from advertising increases. We thank our members who have patronized our friends who advertise. The more patronage, the more advertisers, and the more advertising copy, the larger can be THE JOURNAL. It is our aim to keep the membership informed concerning every activity of the State Society through the pages of THE JOURNAL.

Post-Graduate Activities

The Advisory Committee on Post-graduate Education has been enlarged from nine to eleven members and has continued its pioneer work. We believe the post-graduate program in Michigan leads

the country for thoroughness, progressiveness, and medical cooperation. A new center—the Jackson-Lansing Center—has been developed this year, making a total of seven. Certificates of attendance, as recommended by the House of Delegates last year, have been adopted by your Advisory Committee on Post-graduate Education. We call attention to the fact that this is still a special committee despite action taken by the House of Delegates last year. A change in the By-laws was indicated as your desire, but no formal amendment to the By-laws was presented or adopted.

Legislative

We are approaching a legislative year in Michigan. Your Legislative Committee has developed a Basic Science Bill which has been reviewed by The Executive Committee of The Council. If your House of Delegates approves this proposal, it means that herculean work must be done by the State Society's Legislative Committee and by each County Society Committee—in fact, by every member of the Michigan State Medical Society. The Basic Science Bill is the most important piece of legislation ever presented to us. In the best interests of public health in this state, it must be made into law. We have the numbers—5,500 physicians and their thousands upon thousands of friends and patients. We must work to win in 1937.

The Governor's Commission on Welfare and Relief, composed of 19 members, with one representative, Dr. Insley, from the Michigan State Medical Society, is studying the possible recodification of the state poor laws. In this connection, the phase of relief medicine is being handled by the Subcommittee on Relief Medicine, part of the Committee on Medical Economics. It has unearthed many valuable data. Its studies have given the State Society figures and statistics upon which to base requests to government.

Social Security

Social Security funds are coming to Michigan every month. The medical profession has a special interest in three phases of Social Security activity: (a) The maternal and child-health program, being handled in Michigan by the State Health Department; (b) The Public Health phase, being handled by the State Health Department, in which the County Health unit is being encouraged and aided; (c) The Crippled Child, being handled by the Michigan Crippled Children Commission. We note with pleasure that on the work done so far by the State Health Department under the Social Security Act, no treatment has been instituted; all the work is in health education. The maternal and child health program was developed cooperatively between the State Health Department and the Michigan State Medical Society, and after the agreement of approved principles, it was recommended to all county medical societies. Parenthetically, we believe we have established the beginnings of mutual confidence and a future era of cooperation, by this joint activity. This is a good beginning. If the medical profession and those who are engaged in public health education and administration will constantly bear in mind the aims and ultimate objectives of public health educational programs, there will inevitably develop a spirit of cooperation and assistance. We must make our skill, service and art even more available, for the benefit of the people. We should look forward to a time when the parent will expect the family physician to keep his family in a state of good health and when the physician himself will be ever conscious of his responsibility to his patient in making available the latest advantages of such health service.

REPORT OF SEVENTY-FIRST ANNUAL MEETING

Regarding County Health Units, nine rules for the administration of such units as adopted by the House of Delegates were disseminated to component county societies, and the principle of the County Health unit was encouraged.

"Refresher courses" for physicians having patients in the rural areas of the State were recommended to the State Health Commissioner who arranged the first of these lecture courses for Traverse City, Petoskey, Alpena and Grayling, beginning September 28, 1936, and continuing for six weeks.

In this connection I would like to call your attention to the fact that Dr. A. M. Campbell, of Grand Rapids, is giving up six weeks of his own time without pay to carry on this work. Surely that is an inspiration and an example to us of what men will do and how much of their own time they will sacrifice in the interest of putting across a program of this kind.

A tuberculosis control service in the State Department of Health as a coöperative service with allied agencies was recommended to the State Health Commissioner, and this matter is to be brought up for consideration before the Advisory Council of the State Department of Health at its next meeting.

A medical coöordinator to visit the different counties and demonstrate the technic of preventive tests to physicians was also recommended to the State Department of Health, as well as to the State Welfare Commissioner.

Crippled-Afflicted Child

The problem of medical care for the crippled-afflicted child, under the two state laws, was referred to us by the House of Delegates last year. To indicate the difficulties encountered and the great effort necessarily expended to successfully solve this problem, we shall merely refer you to the chronological activities in connection with the matter: Chronological History of Afflicted-Crippled Child Problem.

September 24, 1935. The House of Delegates, M.S.M.S., authorized the appointment of a committee to contact state officials and present demands for an adequate fee schedule "and that it be empowered to institute such court proceedings as may be necessary to clarify the intent of the present laws governing the activities of the Michigan Crippled Children Commission."

October 18, 1935. State officials present invitation, for the first time, to the Michigan State Medical Society to help solve the afflicted-crippled child problem.

October 30, 1935. The Filter System is created.

November 13, 1935. Integration program of the Public Relations Committee approved and put into operation in the 83 counties.

That one little sentence doesn't by any manner of means tell you the work that was done. I would like to know of a county that Dr. Foster or some member of his committee has not been into in integrating this. I think Dr. Foster personally has been in over seventy-four of the eighty-three counties in Michigan working on this problem. You realize what a cost it must have been to him and what a sacrifice he has made in that connection. (Applause)

December 11, 1935. (a) Special meeting of Executive Committee of The Council with the Crippled Children Commission to give medical viewpoint re Schedules A, B, C, D.

(b) Survey of costs of afflicted-crippled child begun by Medical Economics Committee of the Michigan State Medical Society.

(c) The viewpoint of the orthopedists and the radiologists expressed through organized medicine—the Michigan State Medical Society—resulting in a united front with all groups working harmoniously in the interests of crippled and afflicted children.

I think out of that work that both the radiologists and the orthopedists feel today much more loyal and that they have a responsible and a better friend in the Michigan State Medical Society as a state organization than they ever had before.

January 15, 1936. The Council of the M.S.M.S. officially requests the Crippled Children Commission to reinstate schedules, at once.

March 9, 1936. The Crippled Children Commission establishes Schedules A, B, C, and D to take effect April 1, 1936.

March 10, 1936. The State Administrative Board approves Schedules A, B, C and D.

March 11, 1936. The Governor vetoes these actions.

March 25, 1936. The Michigan State Medical Society Committee contacts the Governor in Lansing.

March 27, 1936. At the request of the Governor, the Michigan State Medical Society Subcommittee on Relief Medicine estimates that medical fees for April, May, June, 1936, will not be in excess of \$150,000.

April 22, 1936. The Executive Committee of The Council officially recognizes the radiologists' complaint that hospitals and laymen are attempting to fix their fees, and it so informed the Crippled Children Commission, and objected to same.

June 3, 1936. The Michigan State Medical Society Committee again contacts the Governor in Lansing.

June 4, 1936. The Governor issues his Executive Order making the Filter System official, and prescribing an affidavit as part of the commitment papers.

July 1, 1936. Conference with the Governor at which he stated he would recommend to the State Administrative Board that Schedules A, B, C and D be reinstated as of July 1, 1936, and that physicians' fees be paid in an amount not to exceed \$50,000 per month until the next meeting of the Legislature.

July 20, 1936. The Michigan State Medical Society Committee meets with the Finance Committee of the State Administrative Board, in Lansing.

July 21, 1936. Schedules A, B, C, and D are reinstated by the Governor, the State Administrative Board, and the Michigan Crippled Children Commission, on the basis of the Governor's recommendation.

The results desired by the House of Delegates were realized without legal action. The finesse of the above activities, on the other hand, made many strong friends for the Michigan State Medical Society and the medical practitioners of this state.

I would like to say in that connection that I believe that the profession has built up a background with the governmental agencies so that we can go in and talk these matters over in many places where we would not have been able to do it with the same spirit of good-will and confidence that would have obtained a few years ago.

The liaison with the Michigan Crippled Children Commission, the Governor, and other state officials, as well as coordinating work between the State Society, the orthopedists, and the radiologists, was progressive and healthful activity. A strong foundation has been built, for future progress. Every meeting of the Crippled Children Commission was attended by a representative of the Michigan State Medical Society by invitation; a special meeting of the Executive Committee of The Council, Michigan State Medical Society, and the Crippled Children was held on December 11, 1935.

I wish I could have taken some of you men into that meeting, where a spade was called a spade on all sides, and there was no question of understanding, where each member of the profession and of the Commission stood. I think out of that frankness that much good was accomplished.

The integration plan of the Michigan State Medical Society is one of the results of the afflicted child problem. The Filter System was the first project to be integrated in every one of the 83 counties. While this threw a great increase of responsibility on the physician, and much extra work on the Councilors, members of the PRC, and on the Executive Office of your State Society, and on the key men in the various county medical societies, it resulted in so much good to the people and to the profession that the effort was well worth while.

Public Health Education

The Joint Committee on Public Health Education originally initiated by the Michigan State Medical Society is a state-wide committee of all groups and agencies interested in public health education. The Michigan State Medical Society is represented on this Joint Committee by five of its members. The Joint Committee has been continuing its good work of educating the public in medical matters and has been very successful because it has "no axe to grind." This year it published an informative booklet on Cancer developed by the Cancer Committee of the State Society. At the present moment it is helping the Radio Committee of the Michigan State Medical Society to coordinate radio activity along health lines over all the radio stations of Michigan.

A Bureau of Information was created during the past year by the State Society to distribute controlled news releases giving the medical viewpoint on all important matters of medical practice and organization. Each committee specifically designates in its official transactions the material to be released; the story is written in the Executive Office and approved by the committee authorizing publicity and also by a committee of The Council before it is released. The public reaction to the work of the Bureau of Information will naturally result in a necessity for the creation of speakers' bureaus by most of the county medical societies.

Other educational activity has been the distribution of hundreds of packages of 21 pamphlets, prepared by the A. M. A., to high schools, colleges, public libraries, Y's, etc., to give negative arguments on the question of socialization of medicine; the publication of a booklet on socialization of medicine by the Public Relations Committee; talks to lay groups by various officers, committeemen, and by the Executive Secretary were made throughout the year on the subjects of medical organization, what the physician is doing for his community, the value of the physician-patient relationship, what socialization of medicine means, etc.; a representative of the Michigan State Medical Society was guest speaker on the program of the annual meeting of the Michigan Association of Probate Judges. His subject was "Opportunities for Cooperation Between the Probate Judge and the Physician."

Organizational Work

In compliance with the instructions of the House of Delegates last September, an executive secretary was employed on October 9, 1935. The executive office was moved to Lansing on November 1, 1935.

I would like to state at this time that I think Bill Burns has probably had the busiest year of his life, and I think he has done personally a wonderful job, and he is to be commended and we are to be congratulated upon his selection. (Applause)

Two Secretaries Conferences were arranged, one in Lansing on January 26, 1936, and one in Detroit on September 23, 1936. These sessions are wonderful aids to better organization and state-wide efficiency.

A committee of The Council was appointed to

study the admission policy at the U. of M. Hospital. This committee is now working.

The subject of "Group Hospitalization" was discussed with representatives of the Michigan Hospital Association on two occasions. Also its operation, advantages and disadvantages were explained by the manager of the Cleveland program. The matter has been referred to the Legislative Committee of the M.S.M.S. No policy has been adopted.

Surveys of social aspects of sickness were urgently recommended to every county medical society, so that problems which exist in a plurality of the counties could be given the special attention of the Michigan State Medical Society, and possible solutions could be integrated throughout the entire state to govern other counties.

A good liaison was developed during the past year with the State Bar of Michigan, which will lead to mutual benefit and greater efforts in the future.

County medical societies were urged to hold regular meetings. Each Councilor was directed to encourage regularity of meetings in his District in order to permit the proper diffusion of desirable programs and projects in every county.

A survey of obstetrical practice to be made by the Maternal Health Committee was approved.

"State Society Night" became an institution during the past year. These important meetings were held in various counties at which the officers of the State Society outlined the work of the organization. President Penberthy presented the Five-Year Program of the Michigan State Medical Society and the Chairman of The Council stressed the greater need for cooperation of individuals in the county societies.

Annual Meeting

The 1936 Annual Meeting is the most ambitious in the history of the Michigan State Medical Society. The scientific program and talent are the best obtainable. A new Exhibits Committee resulted in the presentation of 52 scientific exhibits and 72 technical booths.

I might state that some were turned down because we didn't have space enough for them. (Applause)

A new feature in public education is the opening of the exhibit to the people and the welfare agencies on Tuesday afternoon, September 22.

Coöperation With Others

At all times the interests of the public, which go hand in hand with the interests of the profession, must be safeguarded. There are many groups such as social workers' organizations, lay organizations, public health organizations, governmental agencies, which are sincerely interested in problems of public health. The Michigan State Medical Society through its various committees has frequently recognized these problems which are nothing more nor less than the problem of making available to the public proper medical service in accordance with their needs and ability to purchase that service.

The solution of the proper distribution of medical care will be reached more readily when the medical profession and these various lay organizations get together resulting in a meeting of many minds, all having an interest in the problem. We believe the effective solution of this problem has been delayed by the lack of understanding between these groups. The Michigan State Medical Society made an attempt the past year to arrange for such a meeting of minds—on the phase of relief medicine.

It is the responsibility of every county medical society to see that good medical service is supplied

to everyone in the community who needs it. The more conscientiously this is done, the less interference will be attempted by outside agencies.

Allegiance

In *all* matters of policy, the allegiance of the practitioner of medicine shall be to the county medical society. What other unit has as its reason of existence the betterment of the welfare of the practitioner of medicine? Allegiance to the medical society means allegiance to your ethics and your ideals.

THE SPEAKER: The report of the Council is referred to the Reference Committee on Report of the Council. (See page 750 for report of Reference Committee.) I shall ask Dr. James O'Meara to serve on the Reference Committee on the report of the Council.

Vice Speaker Riley took the Chair.

THE VICE SPEAKER: The next order of business is the report of the Delegates to the American Medical Association. Dr. Brook! (Applause)

VII. REPORT OF DELEGATES TO A. M. A.

Some years ago your delegates to the American Medical Association were admonished to submit to this House a full and complete report of the transactions of the parent body at its annual meeting.

This custom, as you know, has been faithfully followed for a number of years. We feel, however, that it has some drawbacks with the possibility of it being an imposition upon your time and good nature for the following reasons:

The A. M. A. meeting is always held during the first six months of the calendar year, while for some years past our State meeting is held in September. During this rather long interval several numbers of our State Journal are issued which carry from the Editor's pen or other officers of our Society, and very properly so, the most interesting and pertinent items of the A. M. A. activities. Mention of this fact is no criticism whatsoever but rather a compliment to the alertness of these officers to give to our membership the A. M. A. news while it is hot.

Following the A. M. A. meeting the succeeding two issues of the JOURNAL give the complete minutes of the House of Delegates, through which you may browse at your leisure—assuming that you all receive the A. M. A. Journal—and read in detail that in which you may be interested.

To reiterate here that which has already been published in detail and republished as to essentials in our State Journal, we feel, is an unwarranted consumption of time on the part of this house as well as for its preparation by your delegates. Upon this point, however, we believe you should give your delegates very definite instructions for their future guidance, because of their desire to comply with your wishes.

So many subjects of local, general or scientific nature presented by men from various parts of the country, are brought before the A. M. A. House of Delegates that it is practically impossible to include in a report of this kind all of that which may be interesting to everyone and to delete that which we may regard as unimportant. For the above reasons, reiteration and emphasis of what we consider essentials are presented only in this report. We believe you understand that the previous sentence spells "brevity" and assume you are pleased to hear the word mentioned.

Kansas City is an ideal convention city. Its new and commodious auditorium, where all meetings

were held and all exhibits displayed, is located immediately downtown within one and one-half blocks of the hotel district. The A. M. A. has the honor of being the first major organization to hold its convention in the new auditorium. The hotel-auditorium set-up provoked much favorable comment among the delegates.

The outstanding feature of the opening general meeting of the Association was the address of welcome from the Chief Executive of Kansas, Gov. Alf M. Landon, who has since become the Republican nominee for President. His address was very favorably received, as evidenced by the prolonged thunderous applause at its close. Only one person did I notice not participating in the demonstration and this gentleman was a delegate from Alabama. The Governor's staunch defense of "Individualistic Practice of Medicine" comprised a salient feature of the address which met with general approval.

Due to the serious illness of President-Elect Dr. James Tate Mason, the House was placed in a most unusual position in that it would be impossible to install the President-Elect in person. It was therefore agreed that if Dr. Mason was alive at the time he would be installed as President "in absentia." Dr. Mason continued to hold his own and was so installed. Upon the day of his death, June 20, Dr. Charles Gordon Heyd of New York, who was elected Vice-President, became President.

A feature report in executive session was that made by Dr. Carl H. Davis, chairman of the special committee to study Contraceptive Practices. The report is very comprehensive, presents evidence of much study, and contains all the subjects which have been freely discussed in recent years. Upon recommendation of the Committee on Executive Session, Dr. C. E. Mongan, Chairman, the Committee is to continue the study and report to the House at a later date.

Quite properly it may be stated here that a resolution introduced by our own Dr. Henry A. Luce on "Entrance Requirements to Medical Courses of Educational Institutions" was very warmly received and unanimously adopted.

The general trend of the report of the Committee on Medical Education and Hospitals, Dr. Geo. Blumer, Chairman, is summarized in the last paragraph of the report thus: "It further recommends that all services connected with the practice of radiology be under the direct control and supervision of the medical profession, and that this same principle pertain to other technical and professional services."

In the report of the Judicial Council, Dr. Geo. Follansbee, Chairman, there are brought out definite recommendations in regard to a resolution introduced by Dr. Burt R. Shurly at the 1935 session. The resolution, slightly changed, condemned the practice of offering commissions to persons effecting sales of certain mechanical aids for physical defects, and further stated such practice was a violation of the Principles of Medical Ethics.

Dr. E. H. Cary, Chairman of the Committee on Legislative Activities, is an indefatigable worker in the cause of maintaining the present high standards of medical practice. He is admirably fitted for the position by reason of his knowledge of legislative matters, his intense interest in the subject, and because he is financially able to neglect his practice. We earnestly commend to you the reading of the excellent five column report beginning on page 1913 of the JOURNAL.

Among the distinguished guests who addressed the Delegates were Lord Horder of England, Dr. Leon Asher of Bern, Switzerland, and Dr. T. C. Routley, Secretary of the Canadian Medical Association.

Each of these gentlemen was cordially received and each in turn extended cordial greetings from the professions of their countries and conveyed expressions of friendship and good will to the profession of America. It was really refreshing to hear these men from foreign countries talk. If diplomats would follow their example there need not even be the suggestion of international conflict.

There are ten Reference Committees of the House, which has a total membership of 175, which are representatives from 48 states, Hawaii, the Philippines, Puerto Rico, Canal Zone, Alaska and the Army and Navy. The selection of committee personnel is the prerogative of the Speaker. Appointments are made on the basis of familiarity with the work and seniority of membership, so that the entire procedure of the House may function smoothly. Michigan this year was awarded two Committee Chairmanships, which, when you consider that there were only ten to be allotted, was a very distinguished honor. Dr. Luce was appointed chairman of the Committee on Miscellaneous Business, and Dr. Brook, Chairman of the Committee on Credentials.

The entire atmosphere this year seemed to be more one of unity and friendship as contrasted with some of the meetings of recent years. Differences of opinion and rumblings of discontent were much less evident. The basis for this attitude seemed to be the thought that there was much less sentiment for Socialized Medicine. Throughout the entire proceedings there was never a single expression favoring any deviation from the present high standards of practice.

In this connection will you pardon me for deviating a bit for just a moment. The deviation is, however, pertinent to this report.

Two years ago your delegates at the Cleveland convention were in a tough spot. Exercising the diplomacy which comes with experience we successfully emerged as anti-socialistic delegates, and maintained for the physicians of Michigan their traditional reputation as high class sound medical thinkers.

About three weeks ago I received, as I presume you all did, a booklet entitled "Who Wants Socialized or State Medicine," edited by the Public Relations Committee of our Society. The booklet is attractively prepared, the contents concise in presentation of facts, and represents evidence of much thought, labor and research on the subject. Not in twenty-five years do we remember anything of equal value having been produced by our Society. The Public Relations Committee deserves every credit for the production of this valuable, worthwhile contribution. *Its publication is evidence of the fact that Michigan again is leading the profession of America in the righteous cause to preserve for the doctor and the laity such methods of scientific medical service, based upon the application of sound principles and standards of practice, as have proven safe, successful and adequate through all the years.* In our report of 1935—speaking about the defeat of Dr. Moll and Dr. Warnshuis apparently because of certain resolutions introduced at the 1934 Cleveland meeting—we said: "Although we were disappointed in defeat we hold no ill will toward the House membership, being convinced that misunderstandings and incorrect opinions will some day be replaced by confidence and consequent vindication." We believe that the publication of the booklet has done just that, and that the Michigan State Medical Society will again be awarded its rightful place in the councils of the A. M. A.

Some of our members from time to time express the idea that the meeting of the A. M. A. is primarily a gathering of the medico-politico pooli-bahs.

Well, is that what your State Society is for your state? You know it is not. A certain amount of politics exists in every organization and the A. M. A. is no exception. But the business of the Association is conducted by only 175 of the 6,000 or 8,000 physicians attending. Primarily it is the annual meeting of an organization whose membership totals more than 100,000 physicians. All the newest scientific achievements in medicine and surgery are presented and discussed and in many instances the commercial and scientific exhibits present the practical side of employing the newer methods of practice. A combination of these activities, all held under one roof, offer to the doctor at nominal expense a veritable post-graduate course at the greatest annual medical show on earth. We recommend attending whenever possible.

The election of officers took place on Thursday afternoon, May 14. Dr. John Howell Janeway Upham of Ohio was elected President-elect and Dr. Charles Gordon Heyd of New York City, Vice-President, who upon the death of Dr. Mason became President. Other officers were re-elected. Atlantic City, because of proximity of its convention hall to hotels, beat Philadelphia by one vote for the 1937 meeting place.

All of which is respectfully submitted.

Delegates: C. S. GORSLINE, H. A. LUCE, C. R. KEYPORT, L. J. HIRSCHMAN, J. D. BROOK.

(Applause)

The Speaker resumed the Chair.

THE SPEAKER: The Report of the Delegates to the American Medical Association will be referred to the Committee on Officers' Reports. (See page 751 for report of Reference Committee.)

VIII. PROPOSED AMENDMENTS TO BY-LAWS

DR. ROY HOLMES (Muskegon): I would request a change in the order of business so that some of the amendments to the Constitution and By-Laws may be considered. There are some amendments to the Constitution and By-Laws which I would like to present at this time so that they can be considered and we still will have plenty of time and we won't be hurried in our discussion of them when they come up for passage.

THE SPEAKER: The Chair will recognize that request. I think it is important, inasmuch as amendments to the By-Laws must hold over for one session of the House.

DR. H. A. LUCE (Wayne): I move that the reference to changes in By-Laws be made a special order of business at this time.

DR. F. T. ANDREWS (Kalamazoo): I second the motion.

The motion was voted upon and carried.

VIII (1). COUNTY SOCIETY COMMITTEE ON LEGISLATION AND PUBLIC RELATIONS

DR. HOLMES: I move to amend Chapter 9, Section 10, of the By-Laws, the second line, to delete the word "policy" and to insert in its place the word "relations."

Instead of asking each county to have a Committee on Public Policy, it will be a Committee on Public Relations. It is mainly a matter of words.

VIII (2). CREATION OF STANDING COMMITTEE ON POSTGRADUATE EDUCATION

I move to amend the By-Laws of the Michigan State Medical Society by adding to Chapter 6, Section 1 (f), Committee on Postgraduate Medical Education, and adding a new Section 8 to Chapter 6 as follows:

REPORT OF SEVENTY-FIRST ANNUAL MEETING

"The Committee on Postgraduate Medical Education shall consist of eleven members appointed by the President with the consent of the Council.

"The duty of this Committee shall be to supervise for the Michigan State Medical Society all present postgraduate medical training in the state and, with the approval of the Executive Committee of the Council, make any changes, additions or discontinuances of present programs and initiate such new programs as they deem advisable."

In explanation of that, last year the reference committee of that branch of the Committee on Economics recommended this, but failed to put it into the By-Laws to make it official.

VIII (3). PROPOSING SPEAKER OF HOUSE AS A MEMBER OF THE COUNCIL

I move that the Constitution be amended to insert, in line 8 of Article V, following the word "Secretary," "the Speaker of the House of Delegates." The sentence then would read, "It should consist of the Councilors, the President, the President-Elect, the Secretary, the Speaker of the House of Delegates, and the Treasurer of the Society."

An additional line should be added to the Section reading, "The Speaker of the House of Delegates shall be a member of the Council and of its Executive Committee with the power to vote."

VIII (4). SECRETARY AND EXECUTIVE SECRETARY

The last and longest one is a proposed substitute amendment to the By-Laws of the Michigan State Medical Society, Chapter IV, Section 4.

"The Secretary shall be an active member of the Michigan State Medical Society at a salary of \$2,400 per annum and shall be a member of the Executive Committee of The Council. He shall be the recording officer of the House of Delegates, The Council, Scientific Assembly, and General Meeting. He shall also discharge the following duties:

"1. Collect all annual membership dues and such other moneys as may be due to the Society, keep membership records and issue membership certificates.

"2. He shall make all required reports to the American Medical Association.

"3. He shall deposit all funds received in an approved depository and disburse them upon order of The Council. The Council shall cause an annual audit of his accounts by a certified public accountant. He shall render a report to The Council reviewing the Society's activities and imparting recommendations for the advancement of the Society's interests at each meeting of The Council.

"4. Under the direction of The Council and with the advice of the Editor, he shall be the Business Manager of THE JOURNAL.

"5. He shall superintend all arrangements for the holding of all meetings in compliance with the Constitution and By-Laws and the instructions of the Council.

"6. He shall send out all official notices of meetings, committee appointments, certificates of election to office and special duties of committees.

"7. He shall receive and transmit to the House of Delegates and to the Council all committee and officers' annual reports.

"8. He shall institute and correlate all new activities under the supervision of The Council, and shall work on county society integration and furnish information to the public concerning health matters as directed by the President and The Council.

"The Executive Secretary, not necessarily a physician or a member of the Michigan State Medical Society, shall be appointed by The Council annually and shall be remunerated by a salary which shall be fixed by The Council within limits approved by the House of Delegates.

"The Secretary shall, with the approval of The Council, assign to the Executive Secretary such of the above duties as he deems advisable."

THE SPEAKER: That was made in the form of a motion?

DR. HOLMES: Yes.

DR. W. J. CASSIDY (Wayne): I second the motion.

The motion was voted upon and carried.

THE SPEAKER: These will be referred to the Reference Committee on Constitution and By-Laws. (See page 758 for report of Reference Committee.)

IX. REPORTS OF STANDING COMMITTEES

The next order of business is that of the reports of Standing Committees. First is the report of the Legislative Committee, by Dr. H. H. Cummings, Chairman.

IX (1). LEGISLATIVE COMMITTEE

DR. H. H. CUMMINGS (Washtenaw): Mr. Speaker, Members of the House of Delegates: I know you want to save time and I know you have received your Delegates' Handbook in which you will find the report of the Legislative Committee. I want to take time enough to supplement this report, because activities have gone on since this report was sent in to your Secretary.

The Legislative Committee of 1935 was a very active Committee. It had a very fine program outlined and passed on to us. We have conscientiously tried to fulfill and carry on the things suggested by the former Legislative Committee.

In your Handbook, under "Summary of Proceedings of the House of Delegates, 1935," you will notice:

"3. The House of Delegates voted that the Legislative Committee of the Michigan State Medical Society should reintroduce a barbituric acid bill into the next session of the Legislature instead of having it sponsored by the State Commissioner of Health."

A sub-committee was appointed by the Legislative Committee of this year, and a study was made of this situation, in states having a barbituric acid bill. Also, letters were sent to the A. M. A., to ascertain its attitude toward this, and considerable study has been done. However, the work is not completed and it is being continued, and later you will receive a report on this matter.

Under "6" there were eight recommendations of the Legislative Committees, as follows. I am going over all of these because some of them will be brought out in other ways. Your Committee was enlarged to seven instead of six. Dr. Foster and his Public Relations committee carried out No. 2, that is, that every county and district medical society should be stimulated to develop satisfactory and active legislative committees whose legislative policies are definitely established and unified throughout the state, namely, contacting legislators and keeping a closer relationship with public officials.

Of course it is not news; you all know that the Executive Secretary has been on the job in Lansing, which I think has changed the picture completely in all the departments of our state organization. I think everyone feels that Bill Burns has done a fine job this year. He has kept every committee active, informed; and too much praise can not be given to the splendid work that he has done; he and Dr. Ekelund together, and other officers of the Society.

Your Legislative Committee was advised to select a so-called legislative observer. That is a term that had never been used before. Someone suggested "legislative counselor." But regardless of what you care to call this man, the purpose was this: A man in Lansing making contacts with legislators, keeping in touch with bills proposed that might affect the Medical Society of the state or the medical profession. This matter has come before your Legislative Committee and has gone to this point, that several men have been investigated. Dr. Christian has carried on a good deal of work in looking around for the proper man. We all feel that we must get the right man for this position.

There are four things that were very definitely stated in the program for our year. The integra-

tion of medicine is first. Dr. Burke was put at the head of a subcommittee to study this, and began that work, but very early in our year we decided that the chief objective of the Legislative Committee of the State Society should be the passage of a basic science law, and that the integration of medicine program, which is a large program that will require a great deal of time, be set aside for the present.

The unauthorized practice of medicine, which you have seen creeping in from year to year, has been thoroughly studied, and Dr. Burke will report in a few moments to you about that.

On the basic science law I am going to take a little time. I suppose that every delegate here has had a copy of the basic science law. They were mailed last Thursday, and I know some of the doctors from the Upper Peninsula have not received their copies. I am not going over it word for word, but I do want to just summarize this proposal and the work that has been done on it.

Your Committee studied the basic science laws as passed in ten other progressive states, namely Wisconsin, Connecticut, Minnesota, Nebraska, Washington, Arkansas, Arizona, Oregon, Iowa and the District of Columbia. One state had a law which almost seemed to fit our situation here in Michigan, and from this state law our sub-committee drew heavily, changing necessary sections to fit the local situation. The proposed basic science bill represents almost the Minnesota law with some alterations. I want to give Minnesota credit for this, but I might say that all of these states have drawn, one from the other, in order to draft a basic science law.

Now just what is a basic science bill, and what are the objects? Why do we need a basic science law? The Act is "An Act to define and to regulate the practice of healing, to define the term 'basic sciences,' and provide for the appointment, powers and duties of a Board of Examiners in the basic sciences; for the punishment of offenders against the Act, and to repeal all acts and parts of acts in conflict therewith."

The purpose of the basic science law is to protect the public. It isn't necessary to say to this group of physicians that the laity does not discriminate. When they hear the term "doctor" it doesn't mean literary preparation, four years of medical work, internship and all that. They do not know about that. They think of a man who knows all about sickness, who can diagnose their disease and help them. The basic science law aims to help protect these people so that, feeling that way, they see a sign "Dr. So-and-So," and they must contact a man, or will contact a man who has had some training, which, in our bill, corresponds to two years of literary work. That is a good background for a medical training, and it is about the minimum standard. It means that this man, regardless of what he practices, in anything that he practices he has had a training; an adequate training in anatomy, because how can he treat a sick person if he knows nothing about the structure of the machine he treats? Physiology—the normal functions of the body—basic. He must know these things: Anatomy and Physiology. He should know something about disease reactions in the body, pathology, otherwise he would not know diseases or what he was treating. He must know the causes of disease, many diseases—bacteriology: this is not unreasonable. If he is to protect the people of the State of Michigan he must know public health and hygiene. If he is to carry on treatment, if he is to know anything about the diagnosis of disease by various laboratory methods, etc., he must know chemistry. Surely that is the minimum we could ask from anyone who

cared to treat the sick or who was inspired to treat the sick.

With this fundamental training and this knowledge in the six basic science subjects, a man would be fairly well prepared to pursue further study in any healing art. There is nothing discriminatory about this bill. It is not retroactive. It affects no man practicing any form of healing today in this state. We couldn't pass such a bill. It does not aim to weed out the cults. It puts us on an equal footing with ten other states, so that Michigan will not be the dumping grounds of all men and women who care to practice the healing art regardless of their qualifications. That is the way it is going to operate. In a few years the states that are without a basic science law will have dumped in upon them thousands and thousands of individuals who, without adequate training, desire to treat the sick. We must protect the public. We are asking nothing of these people that we do not ask of our own medical students. They will have to pass a Basic Science Board. This Board is made up of six Examiners. These Examiners are not practicing physicians, but they are outstanding men teaching the various subjects, such as physiology, anatomy, chemistry, public health, and pathology. These men will meet and examine every candidate who wants to practice healing in the State of Michigan.

The bill is far from complete. I have briefly given you the synopsis of it. We are not asking something to protect the doctor. I feel sorry for the doctor who feels he must be protected from the cultist. Any doctor who keeps up to date, who has had a good training, need never fear a cultist. It is ridiculous. We are not here to fight the cultists; we are here to protect the public and to raise the standard of those who care to treat the sick—the educational standards. These are the only purposes of the basic science law. It is not to help the practitioner of medicine as we know it. Those of you who have not a copy of the basic science bill will soon have it. I want to ask you to study it because it isn't complete and it isn't perfect. We want the suggestions of every doctor in the State Society. We are going to need your help. The machinery has been set up to pass this bill, but it is going to require more than the work of the state officers, of the committeemen. It is going to require work from every County Society.

I realize that lots of busy doctors say, "I'm not a politician; I'm not interested in politics." Well, gentlemen, I am not a politician. I don't know why I was selected for this job because I knew as little about legislative matters as any doctor in the State Society. But I have learned a great deal, and I wish that every doctor belonging to the State Society might head some committee or work on one of these committees such as we have had this year, because from the President on down every man has given generously of his time and money, has spent long hours, exhausting hours, in working on these various subjects. It is an education in itself, but every doctor in the state must become politically-minded to the extent that you want to see intelligent men in Lansing, men who will listen to reason, men who have been contacted by their own doctors in their own county societies and know the viewpoint of the physicians.

At the present time, when a doctor appears in Lansing the legislators' reaction is this: "Here is a doctor representing a big trust, the American Medical Association or the Michigan State Medical Society. Pay no attention to him. He has an ax to grind. Escape him, get away from him." That is the reaction that you will get in Lansing until the men representing us have been contacted and given the proper medical viewpoint. When this happy

day comes then any progressive legislative measure for the good of the people of the State of Michigan will be passed without difficulty.

Thank you. (Applause)

THE SPEAKER: The report of the Legislative Committee will be referred to the Reference Committee on Standing Committees. (See pages 748 and 751 for report of Reference Committee.)

IX (2). MSMS REPRESENTATIVES TO THE JOINT COMMITTEE

We will continue with the regular order of business, which is the report of the Standing Committee of Representatives on Joint Committee Public Health Education. Dr. Corbus is absent. Does he have anybody to substitute for him? If not, the report, I believe, is found in the Delegates' Handbook. The report of this Standing Committee will be referred to the Reference Committee on Standing Committees. (See page 749 for report of Reference Committee.)

IX (3). COMMITTEE ON MEDICAL ECONOMICS

The next Standing Committee to report is the Committee on Economics, Dr. Pino, Chairman. Is Dr. Pino here? (Absent) The report of the Committee on Economics is in the handbook and will be referred to the Reference Committee on Standing Committees. (See pages 748 and 752 for report of Reference Committee.)

I assume that it is not the fault of the Chair that these men are not here. If they desire to speak at some later date, the Chair will give them the privilege.

IX (4). CANCER COMMITTEE

The next Standing Committee to report is the Cancer Committee, Dr. Brines, Chairman. Is Dr. Brines present? (Absent) The report of that committee will be found in the handbook and will be referred to the Reference Committee on Standing Committees. (See page 749 for report of Reference Committee.)

IX (5). PREVENTIVE MEDICINE COMMITTEE

The next order of business is the report of the Preventive Medicine Committee, Dr. Geib. The report of that Committee is also found in the handbook and will be referred to the Reference Committee on Standing Committees. See page 749 for report of Reference Committee.)

There apparently being nothing more to come before this session, the Chair will entertain a motion to recess until two o'clock.

DR. JOHN L. CHESTER (Wayne): I so move.

DR. CARL F. SNAPP (Kent): I second the motion. The motion was seconded, voted upon and carried, and the session recessed at 12:05 o'clock.

Monday Afternoon Session

September 21, 1936

The meeting convened at 2:05 o'clock, Speaker F. E. Reeder, presiding.

THE SPEAKER: The Chairman of the Credentials Committee will report on attendance of delegates.

THE SECRETARY: Mr. Speaker, I hold in my hands the signed slips of fifty-six accredited delegates. If some delegate will move that this constitute the roll of the House for this afternoon session, we may proceed.

DR. J. M. ROBB (Wayne): I so move.

DR. JOHN SUNDWALL (Washtenaw): I second the motion.

The motion was voted upon and carried.

THE SPEAKER: I therefore open the second session of the House of Delegates.

At this time, according to your program, you will notice that there is a reading and adoption of minutes. There was very little to be done on that, the Secretary states, as it consists mostly of other reports and parts of the reports were not completed, therefore, we will dispense with the reading and adoption of minutes.

IX (3). COMMITTEE ON ECONOMICS—SUPPLEMENTARY REPORT

At this time the Chair would listen to a motion to dispense with the routine business according to the program of the second session, in order to permit a supplementary report of the Committee on Economics, in order that it may be properly referred to the Reference Committee.

DR. ROY H. HOLMES (Muskegon): I so move.

DR. JOHN L. CHESTER (Wayne): I second the motion.

THE SPEAKER: Is there any discussion? If not, those in favor of the motion will say "Aye." Opposed, "No." The motion is carried. The Chair recognizes Dr. R. H. Pino, of Wayne.

DR. R. H. PINO (Wayne): You have the report of the Economics Committee, which was made out a good many weeks ago, when we were asked for a report, in order that it might be published, but before we were ready to give a final report.

I want to apologize for not being on hand this forenoon when a report from this Committee was called for, but we were up in one of the rooms working on some very important material, and thought we would be called when you were ready for us. I am going to skip over the report of the Subcommittee on Relief Medicine, because it is probably the most important part of the report of the Economics Committee, and it will come up for discussion last.

Is Dr. Jennings in the room? We will have first, then, the report of the Committee on Postgraduate Courses for General Practitioners. Dr. Jennings.

IX (3a). SUBCOMMITTEE ON POSTGRADUATE COURSES FOR GENERAL PRACTITIONERS

DR. A. F. JENNING: (Wayne): Mr. Chairman and Members of the Society: The report on the Postgraduate Courses for General Practitioners has been written in the handbook. The question of where this Committee crosses with that of the Advisory Committee on Postgraduate Medicine is still unsolved. We felt that we rather trod upon its toes to a certain extent.

In general, the Committee bore out the recommendations submitted by the previous sub-committee which had to do largely with the work done by Dr. Nathan Sinai and others on the investigation of the need for postgraduate teaching and the facilities for postgraduate teaching throughout the country. The Committee had no further suggestion than to recommend the continuation of that teaching.

Two or three subjects came before this Committee, which were discussed and reported, one the matter of establishing study centers in the various hospitals throughout the state, if that were possible. Another matter came up which possibly again is a little out of line for this Committee; that is, this Committee was established largely for the work for general practitioners, not for the training of specialists. Dr. J. D. Bruce, however, did bring up to this Committee certain matters pertaining to the training of specialists; that is, that the training for specialists might be accomplished elsewhere than in large teaching centers. The Committee recommends that that be studied very carefully.

REPORT OF SEVENTY-FIRST ANNUAL MEETING

A final matter was the question of intensively studying, throughout the state, various diseases in order that we could have a comprehensive survey of certain various specified diseases from year to year in order that our method of treatment, diagnosis, etc., might be standardized and knowledge of them more widely diffused. The Committee recommends that these matters be taken up by this Committee or, if not, by another Committee, and we would also request that the matter of post-graduate teaching as such be left in the hands of one committee.

IX (3b). SUBCOMMITTEE ON INDUSTRIAL MEDICINE

DR. PINO: Now, the problem of industrial medicine. This is a subject that was given to the Economics Committee last year. We were supposed to bring in a report this year. We have arrived, as we have stated in this preliminary report, only to this point, that the subject is altogether too big a subject to be undertaken by the Economics Committee of any state society or county society to be able to bring in a report that is at all adequate.

I am going to read to you a resolution, first so that from the resolution we can argue back to the reason for it and then you can do as you wish with the resolution after it has gone to the proper committee:

"WHEREAS, It is conceded that an analytical evaluation of all phases of industrial medicine would be to the best interests of all concerned, and

"WHEREAS, The problem is one nation-wide in scope; therefore, be it

"RESOLVED, That the Michigan State Medical Society instruct its delegates to the A. M. A. to introduce at the next meeting of the House of Delegates a resolution embodying the essential facts involved, requesting the A. M. A. to proceed at once with a nation-wide survey."

There was considerable argument in the Economics Committee as to the advisability of any report whatsoever. We want to recognize this, that as in ophthalmology and many of the specialties, Boards have been set up to make it possible that men who would qualify for certain specialties will really qualify. We have in every specialty those who might be considered competent and those who may not be considered competent, and through these Boards it is hoped that by the process of pressure of the evolution a desirable situation will come to pass earlier than would otherwise be the case.

We recognize full well that there are a great many men—probably the majority of men—who are doing work in industrial medicine and surgery of the very highest type, and naturally they feel that no study or investigation of any type is indicated by a state medical society or a county medical society. They feel that the evolutionary processes will result in all of the things being ironed out of that type of work that is not good. However, there are those who think quite the opposite. At any rate, we were asked to bring in a report, and we have to give reasons why we are submitting the resolution. I want to read to you, after stating what I have, relative to those doing this kind of work, some reasons why some others feel that a study should be made—and understand, we mean a study bringing in recommendations to the best interests of all concerned.

Others state this: "In the competition between the insurance companies for the low premium on the risk, competitive bidding by unscrupulous doctors results to the disadvantage of the profession and the patient, the doctor hoping to extract from the patient privately what he does not get from the insurance company. Under the present arrangement, as industrial insurance is practiced in Michi-

gan, the profit realized from the medical service to these companies goes to the insurance companies rather than to the doctor who has put in long years in preparation for the service. The insurance companies concentrate their work among a very few men who, in turn, do a much greater amount of work than they are actually paid for. The work should be more widely distributed (I am not giving you the opinion of the Economics Committee) to insure fairness to both patient and physician. Under the present industrial system, the man injured in industry has no choice of his physician. He has to accept the physician offered him regardless of whether he receives fair and competent treatment or not, whereas, if he had a panel from which to choose he would be assured of more careful and considerate treatment. The New York State plan follows the panel system.

"Where the industrial concern carries both health and group insurance and compensation insurance, there is a tendency in some plants for the doctor to take advantage of this and direct privately the medical care of the entire organization."

Now, since there are these two sides some of our splendid men devoting all of their time to this thing which they feel is a specialty, whereas, there is this other side and whereas, it has been given to us to bring in a report, and whereas, it is impossible for us to bring in any report that is adequate, as this is a subject that needs study, we present the resolution which I have read, and that is all we have to report on this subject of industrial medicine.

IX (3c). SUBCOMMITTEE ON GROUP HOSPITALIZATION

Now, coming to group hospitalization, you have perhaps read the report that has been printed. We are only stating in this report that we believe it would be best for the Michigan State Medical Society, instead of committing itself at all on the subject of group hospitalization, to take the attitude of watchful waiting, to study the results of this in other states and then, if it seems to work successfully and if it preserves the physician-patient relationship, it might be endorsed.

There are no resolutions of any kind that we can present on this subject. We advocate watchful waiting and a study of the subject.

IX (3d). SUBCOMMITTEE ON RELIEF MEDICINE

We can now present the subject of relief medicine, in charge of Dr. Insley. Dr. Insley has given a tremendous amount of time and thought to this subject this year. I want you to know this, that so far as I am concerned, I have bent backward in this matter of government practice of medicine. I have given a great deal of thought, as have all of the members of this committee; Dr. Insley and I have worked together for nearly four years in the matter of the Medical Service Bureau of the Wayne County Medical Association, which has to do with an arrangement, logically set up, whereby an individual who can not pay today for medical care can do it on a postponement basis, and, believing that everyone, so far as possible, should do that, we have worked hard and, as I say, bent backward in this matter of trying to have patients pay all they can logically pay, instead of having it paid by someone else.

Now, we come to the subject of relief medicine for the indigent individual, and I have had a number come to me to urge that the matter of having some kind of set-up, state-wide, with a state director, so that throughout the counties of Michigan there would be adequate and the same type of medical care for indigent people, be given consideration. We have thought about it from all

angles. I think that Dr. Insley and his subcommittee have thought it through adequately, and that what he has to present will include the best that is now used by the various counties in the state in the care of the indigent. Dr. Insley.

DR. S. W. INSLEY (Wayne): This report has been stripped to the minimum in an attempt to keep the policies in as clear a fashion as possible.

Before I proceed I wish to call the attention of the gentlemen here to the fact that a number of the policies and statements made in this report follow what Dr. Pino has just said—what we have considered the better practices of the various agencies now dealing with the matter of relief.

Dr. Insley continued by reading his paper.

The Sub-committee on Relief Medicine offers the following principles to be included in the proposed revision of medical relief legislation.

1. Welfare officials of the local district or county shall provide medical care for sick persons whenever necessary, providing they are on direct relief.

2. Such persons in need of health care shall be attended by and receive such care from their own family physician or physician of their own choice in so far as practicable.

3. Payment for approved services shall be made in accordance with a scale of fees agreed upon in advance by local welfare officials and representatives of the medical profession.

4. Pursuant to these proposed enactments, there shall be created in each local district or county welfare unit, a medical advisory and filter board composed of representatives from the organized medical associations. Members of this board shall serve without pay or compensation.

5. All matters pertaining to medical policies, and discipline, and determination of medical necessity shall rest with the professional members of this board.

6. The local district or county welfare officials shall appoint a local district or county medical officer who has been approved by the local advisory filter board. This medical officer shall serve in an administrative capacity; and shall approve and certify for the local district or county welfare unit to individual medical necessities under regulations prescribed by the Medical Advisory and Filter Board. This officer shall be properly compensated by the local district or county welfare unit.

7. All persons not on direct welfare relief, who desire or are in need of public aid to obtain necessary medical care, shall, after approval of medical necessity, have their individual cases reviewed by the county probate courts. The court shall adjudicate the claims of all parties concerned, and certify to public funds necessary in case of proven partial or total indigency. Agreement by the applicant for partial payment or post-payment of incurred costs shall be encouraged. All collections upon part or post-payment agreement shall be made directly to the professions involved, and not indirectly through governmental agency. The various types of health necessity shall be approved and certified to by the local district or county medical officer as provided for by the local district or county Medical Advisory and Filter Board.

We further recommend retention of the present Crippled Children Commission, who shall deal exclusively with crippled children; the so-called afflicted child to be handled through the enactments suggested above.

IX (3e). SUBCOMMITTEE ON INSURANCE EXAMINATIONS

DR. PINO: Has Dr. Holmes come in? I think the report of Dr. Holmes' Committee is published

in the last number of the JOURNAL so that that will stand, then, as it appears there.

THE SPEAKER: This report of the Committee on Medical Economics will be referred to the Reference Committee on Standing Committees. (See pages 748 and 752 for report of Reference Committee.)

The Chair will entertain a motion to revert to the regular order of business.

DR. A. P. BIDDLE (Wayne): I so move.

DR. J. M. ROBB (Wayne): I second the motion. The motion was voted upon and carried.

X. REPORTS OF SPECIAL COMMITTEES

THE SPEAKER: We now return to the regular order of business, and that order of business is the reports of Special Committees, the first of which is the Public Relations Committee. Dr. Foster.

X (1). PUBLIC RELATIONS COMMITTEE

DR. L. FERNALD FOSTER (Bay): Mr. Speaker and Members of the House of Delegates: The Public Relations Committee submits its report without change from its presentation in the handbook.

THE SPEAKER: Therefore, the Reference Committee will find the report of the Public Relations Committee in the handbook. (See page 757 for report of Reference Committee.)

X (2). MATERNAL HEALTH COMMITTEE

The next special committee to report is the Maternal Health Committee, Dr. Alexander Campbell.

DR. H. W. WILEY (Ingham): Dr. Campbell is unable to be here and asked me to report that the report of this Committee had been submitted and printed in the handbook.

THE SPEAKER: The report, to which there have been no additions or supplements, will be referred to the Reference Committee on Special Committee. (See page 757 for report of Reference Committee.)

X (3). RADIO COMMITTEE

The Radio Committee, Dr. Fred Cole. Is there any addition to the report of the Radio Committee aside from what is printed here in the handbook?

DR. FRED H. COLE (Wayne): Nothing other than is printed in the handbook.

THE SPEAKER: Thank you, sir. Therefore, this report will be referred to the Reference Committee on Special Committees. (See page 757 for report of Reference Committee.)

X (4) THE ADVISORY COMMITTEE, WOMAN'S AUXILIARY

DR. J. M. ROBB (Wayne): There is no further report other than is printed in the handbook.

THE SPEAKER: This will be referred to the Reference Committee on Special Committees. See page 757 for report of Reference Committee.)

The next order of business is the report of the Liaison Committees for Hospital, with the State Bar, with Dentists, Nurses and Pharmacists Associations. Dr. Gruber, for the Hospitals.

X (5). LIAISON COMMITTEE WITH HOSPITAL ASSOCIATION

DR. T. K. GRUBER (Wayne): Mr. Speaker, we have no change in the report from that printed, and we submit the report as printed.

THE SPEAKER: Thank you.

Is there anybody to report for the Bar Association? Dr. Jennings.

X (6) LIAISON COMMITTEE WITH THE STATE BAR

DR. JENNINGS: Mr. Chairman and Members: The Liaison Committee with the State Bar of Michigan has held several rather important meetings, one last night, so the supplementary report is necessary.

REPORT OF SEVENTY-FIRST ANNUAL MEETING

A committee also has met with the Wayne County Medical Society discussing the subject of medical testimony. The attorneys seemed to feel that possibly some changes could be accomplished in the question of medical testimony. The only suggestion that the attorneys have so far made would be, I am sure, unacceptable to the medical profession.

There have been no other suggestions that we can put before the House. We feel that the question is one which will require a great deal of discussion, and we recommend that the Liaison Committee be continued for the further discussion of this very important matter.

As I was informed by our President last night, the matter of having a committee discuss problems in common with the medical profession and the legal profession is a new one, and I feel that we have made in our discussion so far a very important step toward a common understanding of some of our problems. Our Committee would recommend that that work be continued.

THE SPEAKER: Thank you, Dr. Jennings.

The Dental, Nurses' and Pharmacists' Associations: Dr. Greene, of Shiawassee.

X (7). LIAISON COMMITTEE WITH DENTISTS, NURSES AND PHARMACISTS' ASSOCIATIONS

DR. I. W. GREENE (Shiawassee): We have no formal report. The officers of the Society felt that because of the varied activities of the societies it was better not to attempt to start any extra-curricular society such as the Public Health League of Michigan, and that the work would be better deferred until some other year.

THE SPEAKER: These various reports of special committees will be referred to the Reference Committee on Special Committees. (See page 758 for report of Reference Committee.)

X (8). MEDICO-LEGAL STUDY COMMITTEE

The next committee to report is a committee which is not published in your regular program. That committee was appointed in the early part of the year by the Speaker, as ordered a year ago by the House of Delegates, to study the Medico-Legal Defense Fund. The Chair will recognize Dr. Greene, Chairman of that Committee.

DR. GREENE: Mr. Chairman, the report of our committee is published in this handbook. Do you wish any further report than that?

THE SPEAKER: Have you any supplementary report?

DR. GREENE: No supplementary report or changes.

THE SPEAKER: Thank you. This report will be referred to the Reference Committee on Special Committees. (See page 751 for report of Reference Committee.)

X (9). IODIZED SALT COMMITTEE

At this time the Chair wishes to recognize another special committee—the Iodized Salt Committee. The Chair will recognize Dr. Miner.

DR. F. B. MINER (Genesee): Mr. Speaker, Mr. President, Delegates of the House: Dr. Cowie, Chairman of the Iodized Salt Committee or the Goiter Committee, was unable to be here today and asked me, as Secretary, to give a brief report from the data which were agreed to last Thursday. We regret very much that our work is not completed and that this partial report was not completed in time to have it printed in the handbook.

Your Iodized Salt Committee, working in cooperation with Dr. C. C. Slemons, Commissioner of the Michigan Department of Health, wishes to report progress in study and in compilation of figures of its resurvey for the incidence of endemic goiter

of school children made in November and December, 1935. This work was done in four counties, Macomb, Midland, Wexford, and Houghton, and the city of Grand Rapids, thus using the same areas which were originally surveyed by the State Department of Health, in 1924. The Committee was most fortunate in securing the services of Dr. O. P. Kimball of Cleveland, Ohio, who was the director of the former survey. In this work he was assisted by three physicians from the State Department of Health, one from the Pediatric Department of the University, and one from the Children's Clinic at Marquette. Without the assistance of this splendid staff, the survey would have been impossible.

This resurvey was prompted by Dr. Roy D. McClure's published study of the marked decrease in surgical goiter since 1927, in Michigan's seven largest hospitals as due to the use of iodized salt, which came on the market March 24, 1924—eleven and one-half years ago. It will be remembered that this body, the Michigan House of Delegates, approved at its 1923 meeting, the recommendations of this same Committee to contact the Salt Producers Association and arrange, if possible, for the production of iodized salt.

The questionnaire used in this resurvey aimed to determine the incidence of goiter in school children of today and also to learn pertinent facts about the family use of iodized salt. The difficulty in classifying the layman's answers to this latter question has caused the delay of our report. In the completed analysis we aim to answer all controversial questions raised by the opponents of iodized salt, or at least to shift the burden of proof to them.

The findings thus far indicate a very worthwhile contribution to preventive medicine by the Michigan State Medical Society. It is impossible in this brief report to give you the scope of the use of iodized salt throughout this entire country. In the sales of the largest manufacturer Michigan stands tenth. Much credit is due the Michigan Salt Producers for their keen philanthropic interest and generous contributions to the resurvey fund, and also to Dr. William Hale and the Dow Chemical Company.

We respectfully ask that the following partial figures showing the present incidence of goiter as compared with the former survey be withheld from publication or use until the Committee can render a completed report.

In all, 61,641 children were examined—32,833 in the four counties; 28,808 in the city of Grand Rapids.

	Houghton County	Wexford County	Midland County	Macomb County	
Per cent of Goiter, 1924.....	64.4%	55.6%	32.7%	26 %	
Per cent of Goiter, 1935.....	15.8%	12.2%	5.2%	3.6%	
Per cent decrease in 11 years....	75.4%	78 %	84.5%	86.1%	
					City of Grand Rapids
Per cent of Goiter, 1923.....					30%
Per cent of Goiter, 1925.....					27%
Per cent of Goiter, 1928.....					14%
Per cent of Goiter, 1935.....					3%
Per cent decrease in 12 years.....					90%

The Michigan Agricultural Department has given us the analyses of the iodine content of thirteen different brands of salt distributed in the state. Most of these tally with or are close to our recommended requirement of .02 of one per cent. None are above but a few are far below. Your Committee has found no reason warranting a change from the former recommendation of .02 of one per cent.

A standardization committee in the Salt Producers Association has been named and your Committee plans to contact their committee at the opportune time.

Your Iodized Salt Committee respectfully asks approval of their partial report and begs permission to complete its study and publish a final report.

D. MURRAY COWIE, M.D., Chairman
FREDERICK B. MINER, M.D.,
Executive Secretary and Treasurer.

THE SPEAKER: This report is referred to the Reference Committee on Special Committees. (See page 757 for report of Reference Committee.)

X (10). ADVISORY COMMITTEE ON POST-GRADUATE EDUCATION

The Reference Committee on Special Committees will find the report of the Advisory Committee on Postgraduate Education in the handbook. (See page 757 for report of Reference Committee.)

X (11). COMMITTEE STUDYING FEE SCHEDULES A, B, C, D

The Chair, at this time, will recognize Dr. Penberthy, who will give a report on the revision of Schedules A, B, C, and D.

DR. GROVER C. PENBERTHY (Wayne): Mr. Speaker and Members of the House of Delegates: This Special Committee is reporting on the revisions of fees as affecting the crippled and the afflicted child, two Acts, 236 and 237, which cover the Schedules A and D, and C. For your information, I think it should be known that the state administration asked that a committee from the State Society be appointed to review the fee schedules drawn up some years ago, and in some instances to clarify some of the diagnoses and conditions for which fees were allowed. As a result the Chairman of the Council appointed the following Committee: Dr. C. T. Ekelund, Dr. L. F. Foster, Dr. C. R. Keyport, Dr. Frank H. Purcell, and Dr. E. R. Witwer.

Your President sat in and is reporting for the Committee. The Committee met on two occasions and reviewed the fee schedule. The State Society has never felt that it wanted to adopt a fee schedule of any kind, but for the purpose of aiding the Auditor General and to simplify the activities of the operation of the two Acts, the State Society felt that some type of fee schedule should be recognized and used. As a result the Committee met on two occasions and changed some of the fees. Some were lowered, some were raised, and in reporting for this Committee, I think it only proper that this House of Delegates be acquainted with the report of the Committee which was submitted to the Council.

There is only a limited number of copies of this report affecting the afflicted child, but we have any number—and I think a sufficient number—of reports from the Crippled Children Commission and their report on Schedule C. Following is the report of the Committee on Schedules A and D.

* * *

In recommending revision of Schedules "A" and "D" as promulgated by the Crippled Children Commission and the State Administrative Board, the Executive Committee of the Michigan State Medical Society has appointed a special committee to study the schedules in their entirety with a view to correcting certain inequalities and clarifying certain items rather ambiguously tabulated. The Committee herewith respectfully submits its recommendations and believes that they will reflect the coöpera-

tive spirit which has actuated the officers and committees of the State Society during the past year.

It should be noted that the fees listed are in every instance one half or less of the prevailing average fees charged in private practice to people of small means, and are considerably less than half of prevailing average fees in many other parts of the United States. The schedule as herewith revised, therefore, represents a level so low that subsequent revision could be expected in one direction only. Due cognizance has been taken of the necessity for strict economy in the administration of the Crippled and Afflicted Child Acts, but it should be emphasized that the monetary values placed upon the specific items of service by this schedule are uniformly at the lowest possible level commensurate with a sustained good quality of service.

Experience in many areas has shown that the medical profession has discharged its obligation to society with fidelity and with efficiency and that instances of exploitation, which individually loom large, comprise in the aggregate less than one per cent of the total value of all services rendered. The Michigan State Medical Society pledges its continued coöperation in eliminating unwarranted expenditures under these Acts. We would, however, call attention again to the vulnerability of the State under the existing methods of economic investigation. The Michigan State Medical Society has, we contend, put its own house in order in the establishment of medical examining boards throughout the state. These boards for the most part are operating satisfactorily, but the economic filter boards are as yet inadequately organized in many areas, and for one reason or another do not operate efficiently. In many instances this is due to lack of funds for conducting adequate economic investigation.

Doctors do not deal in tangible merchandise with prices fixed by cost of production, but do deal in health and life, upon which no price can be placed. The public at large and its servants in public office should recognize the fact that efficiency in the practice of medicine is dependent upon an adequate financial support of the physician. A living wage for the doctor and his family and the heavy overhead which his profession demands must take only part of his income. In addition, he must have means with which to keep abreast of progress in medical science, to purchase new books and instruments and to visit clinics and large centers for medical study. In this way only can the benefits of modern medical science be made available to those who are sick. An inadequately supported medical profession means an inadequately served public.

The fees listed in the accompanying schedule[†] remunerate the physician for no more than the actual expense involved in most instances. Accordingly, it should be specifically emphasized that this fee schedule is in no sense to be interpreted as a basis for fees charged private patients.

GROVER C. PENBERTHY, *President*
HENRY COOK, *Chairman of the Council*
C. T. EKELUND, *Secretary*
L. F. FOSTER
C. R. KEYPORT
FRANK H. PURCELL
E. R. WITWER

[†]The Fee Schedules, as revised, will be published in detail in THE JOURNAL at a later date, as soon as the Special Committee of The Council has presented the results of its study to the Michigan Crippled Children Commission and the Augmented State Administrative Board and obtained the approval of these two governmental bodies, which are charged by law with the administration of the Acts.

REPORT OF SEVENTY-FIRST ANNUAL MEETING

DR. PENBERTHY (continuing): That covers A and D as pertaining to the afflicted child. Schedule C, as approved by the orthopedic surgeons and as recommended to the Crippled Children Commission, is submitted in addition to Schedules A and D. I respectfully submit these reports to the proper committee for consideration.

THE SPEAKER: This report is referred to the Reference Committee on Special Committees.

The Chair will, at this time, recognize Dr. Purcell, if he so desires, to discuss this matter from the orthopedic standpoint. Dr. Purcell.

DR. FRANK H. PURCELL: Mr. Chairman, there isn't anything special that I can think of now. However, if there are any questions that anybody has to ask, I would be glad to answer them. This fee schedule was left exactly the same as it has been going on in the past few years, pertinent to the charge of prices for operative work or non-operative work. There have been a few minor changes; one, if you look at the first page, "No series of charges for the same child for any one year shall exceed \$200 regardless of the number of operations or applications of casts for the orthopedic or plastic condition."

The reason that was changed is this: In the past commitments were allowed to go on for a considerable length of time, year after year. If six, seven, or eight operations were performed in any of these cases, \$200 was always the limit, regardless of the number of operations you did and regardless of the length of time of after care. Recently there has been a change in the time allotted for the commitment of these patients. It was cut down to two years, two years ago, by the Commission, under this Crippled Children's Act. On the afflicted, I think it has been one year.

In the past year, due to the action of the present administrative board in Lansing, it has been cut down to one year. Now, if a case were operated on six or seven times during the one year and then discharged, and then committed at a later date, two or three years later, we feel that there should be some small charges allowed later, but they can never exceed, under continuation of care over an indefinite time, \$200, which it has always been. That is the number one revision. If there are any questions on that point I would like to answer them.

The same applies on page 3, for multiple minor work. The former schedule for multiple minor work was \$150 for all your plasters. If your plasters had to be changed a greater number of times than you expected, no fee was paid for those, nor were there fees paid for visits after.

Class No. 3, on page 3, is another class of operation, including some work on club feet, for which major multiple work \$100 is charged. That fee is still the same. The only change in any of those three classifications would be in the amount of time the commitment was made for.

Then, on page 4, the non-operative cases, such as acute poliomyelitis, early spastic paralysis, new Erbs palsy, infantile torticollis, postural defects and scoliosis. These cases all require considerable non-operative treatment. Of course, the manner in which these cases are treated would be an examination, then referred to the Department of Physiotherapy for treatment, and then referred back at a later date, say once a month, to the surgeon for check-up examination, to determine whether the same treatment should be carried on or discontinued. We are asking now, which was not present before, a \$2 charge for the examinations made at those times. Those are all the revisions, and they are all minor.

No, there is one other one here. Formerly, if we performed an operation, say a single operation, we had to take care of those cases for ninety days after the operation, and that included visits, detail work, changes of plaster in tubercular hips, whatever the case might be. Originally, this was thirty days, and a few years back, for economy, we suggested that we continue with the care of these cases for a ninety-day period. Now we ask that it go back to the thirty-day postoperative care. On the afflicted you have fifteen days' care.

You must remember that in these cases there is always a great deal of work that perhaps we aren't looking for that we have to do anyway, and we feel it is extremely fair to ask that our postoperative work be reduced to thirty days from ninety.

Those are all the revisions made.

THE SPEAKER: Thank you. This, likewise, will be referred to the Reference Committee on Special Committees.

Are there any other Special Committees which have been appointed and which are not mentioned in the program? If not, we shall proceed with the next item of business.

XI. RESOLUTIONS AND NEW BUSINESS

We proceed with the next order of business, that of resolutions and new business. The Chair recognizes Dr. Henderson of Wayne.

XI (1). EMERITUS MEMBERSHIPS

Dr. L. T. Henderson read the prepared resolution:

Resolution Relative to Emeritus Memberships:

Upon recommendation of the Wayne County Medical Society, the Council of the Michigan State Medical Society, at its meeting of January 15-16, 1936, voted favorably to recommend to the House of Delegates of the Michigan State Medical Society, meeting in Detroit, September, 1936, that Drs. A. Thuner, Angus McLean and A. N. Collins be made Members Emeritus of the State Society and Affiliate Fellows of the American Medical Association. The requirements of the By-laws of the Wayne County Medical Society and Michigan State Medical Society with reference to Emeritus Membership have been met in all these cases.

Dr. A. Thuner has been engaged in the active practice of medicine for fifty-seven years. He was born in 1857, in the City of Detroit, graduated from the Detroit Medical College in 1879, and established practice immediately after his graduation, in the City of Detroit. Dr. Thuner was City Physician for two years, County Physician for two years, and has been a member of the Wayne County Medical Society, Michigan State Medical Society, and the American Medical Association since April 7, 1906, a period of thirty years. In recognition of the long period of activity with the Wayne County Medical Society, the Society conferred Honor Membership to Dr. Thuner.

Dr. Angus McLean has been engaged in the active practice of medicine for fifty years. He was born in St. Clair County, Michigan, in 1862, and his preliminary education was received at the Collegiate Institute of Strathroy, Ontario, graduating from the Detroit College of Medicine in 1886. Dr. McLean has been connected with City and State government in several capacities. He was City Physician from 1881 to 1891, and in 1893, was appointed Quarantine Inspector for the port of Detroit by President Cleveland. Police Surgeon from 1895 to 1901, and from 1905 to 1913, he was professor of Clinical Surgery at the Detroit College of Medicine. In 1905, he was appointed to serve on the State Board of Health, and in 1911, became a member of the Detroit Board of Health. His present position as School Inspector in the City of Detroit has earned for him an enviable reputation in educational lines. Dr. McLean's military record also represents outstanding achievements. Dr. McLean was President of the Wayne County Medical Society and in 1920, was President of the Michigan State Medical Society. Dr. McLean has been a member of the Wayne County Medical Society since 1888, a period of forty-eight years, and was made an Honor Member, November 1, 1935.

Dr. A. N. Collins has been engaged in the active practice of medicine for fifty-one years. He was born in Jefferson County, New York, in 1861, graduated from the University of Michigan in 1885. He located in Detroit, in 1888, and was in continuous practice since that date until his recent retirement. Dr. Collins was President of the Wayne County Medical Society in 1911-12. He has been a member of the Wayne County Medical Society since 1888, a period of forty-eight years, and was made an Honor Member, December 6, 1935, in recognition of his long affiliation and service to the Society.

DR. HENDERSON (continuing): Mr. Chairman, I move the adoption of the resolution.

DR. F. T. ANDREWS (Kalamazoo-VanBuren): I second the motion.

The motion was voted upon and carried. (See page 761 for report of Reference Committee.)

XI (2). RESOLUTION RE: QUALIFICATION FOR HOSPITAL STAFF MEMBERSHIP

Dr. Andrews read a prepared resolution.

WHEREAS, It has been the aim of the House of Delegates of the American Medical Society, to make each and every physician and surgeon on the staff of a recognized hospital, a member of his County Medical Society; and

WHEREAS, There are physicians on the staff of various hospitals in Michigan, who do not conform to this aim;

BE IT RESOLVED, That the Michigan State Medical Society order its officers and committees and component counties' officers and committee to refrain from recognizing or approving any hospital in which staff physicians are not members of their county society.

THE SPEAKER: This resolution will be referred to the Reference Committee on Resolutions.

The Chair recognizes Dr. Christian, of Ingham.

DR. L. G. CHRISTIAN (Ingham): The Ingham County Medical Society has instructed its delegates to see that the following resolution is presented concerning the Coroner Medical Examiner system:

XI (3). RESOLUTION RE: MEDICAL EXAMINER SYSTEM IN MICHIGAN

WHEREAS, The Coroner System of Medico-Legal Investigation which is employed in Michigan at the present time has not been altered to meet new conditions and

WHEREAS, The cause of death, in many instances, is left to be determined by laymen who have had no training for this work,

WHEREAS, There is cause to believe that as a result of this, many cases of homicide go undiscovered and unpunished and,

WHEREAS, The Medical Examiner System has been in operation in New England for nearly seventy years and has proven itself effective and efficient, now

BE IT RESOLVED, That the House of Delegates of the Michigan State Medical Society go on record as recommending the adoption of the Medical Examiner System for the state of Michigan and,

BE IT FURTHER RESOLVED, That it request the Crime Commission to use its influence in forwarding legislation to bring this about.

THE SPEAKER: It is referred to the Reference Committee on Resolutions. (See page 761 for report of Reference Committee.)

XI (1). RESOLUTION RE: EMERITUS MEMBERSHIP

DR. F. H. FERGUSON (Ionia-Montcalm): Gentlemen: The Ionia-Montcalm Medical Society submits the following resolution:

The Ionia-Montcalm Medical Society has the honor to recommend for Emeritus Membership, in the Michigan State Medical Society, Dr. F. A. Hargrave, of Palo, Michigan.

Dr. F. A. Hargrave was graduated from the University of Michigan, in the class of 1884, and has practiced in the village of Palo, Ionia County, Michigan, continuously since that time.

He has been president of the County Society, and has been an active member since its organization.

THE SPEAKER: It is referred to the Reference Committee on Resolutions. (See page 761 for report of Reference Committee.)

Dr. A. T. Hafford, of Calhoun, read his prepared resolution.

XI (4). RESOLUTION RE: COMMITTEE ACTIVITIES

WHEREAS, it is now the policy of the Michigan State Medical Society that all committee activities be integrated through the Secretary at the Executive Office in Lansing and the Public Relations Committee, and

WHEREAS, the House of Delegates believes this policy has increased the activities and efficiency of our State organization,

BE IT RESOLVED, That all committees of the Michigan State Medical Society call their meetings through the Secretary and that either the Secretary or the Executive Secretary attend and cover such meetings and that all standing and special committees of the Michigan State Medical So-

ciety shall carry on their work and make their reports through the Secretary at the Executive Office in Lansing.

BE IT FURTHER RESOLVED, That all correspondence should be on the official stationery of the Michigan State Medical Society, bearing the address of the Executive Office, 2020 Old Tower, Lansing, Michigan.

Approved.

THE SPEAKER: It is referred to the Reference Committee on Resolutions. (See page 761 for report of Reference Committee.)

XI (1). RESOLUTION RE: EMERITUS MEMBERSHIPS

Dr. R. G. COOK (Kalamazoo): The Kalamazoo Academy of Medicine has requested me to recommend the name of a man in our county for member emeritus, a Dr. G. M. Braden, of Scotts. Dr. Braden was a graduate of the University of Michigan, in 1883, has practiced medicine continuously in Kalamazoo County for fifty-two years, and has been a member of the Kalamazoo Academy of Medicine since 1889, forty-seven years.

THE SPEAKER: The resolution will be referred to the Reference Committee on Resolutions. (See page 761 for report of Reference Committee.)

DR. L. F. FOSTER (Bay):

"WHEREAS, Drs. J. W. Leininger and A. O. Boulton, of Gladwin, have fulfilled the requirements of retired membership in the Michigan State Medical Society, be it
"RESOLVED, That they be granted such membership."

THE SPEAKER: The resolution will be referred to the Reference Committee on Resolutions. (See page — for report of Reference Committee.)

DR. HOLMES: The Muskegon County Medical Society has asked me to submit the following resolution:

XI (5). RESOLUTION RE: CRIPPLED CHILDREN COMMISSION

WHEREAS, The Crippled Children Commission, through its Executive Secretary, has arbitrarily dictated to physicians of this state in matters which, ethically, should be decided only by the doctor and his patient, and

WHEREAS, There is a system of solicitation of patients by paid employees of the Crippled Children Commission and its allied societies believed to be contrary to the ethics of the American Medical Association and its allied societies, be it

RESOLVED, That a committee be appointed from the House of Delegates to investigate the activities of this Commission and the members of the Michigan State Medical Society who are interested in these unethical procedures—this Committee to report promptly to the Executive Committee of the Michigan State Medical Society with recommendations.

THE SPEAKER: It will be referred to the Reference Committee on Resolutions. (See page 761 for report of Reference Committee.)

Dr. Dean W. Hart of Clinton read his prepared resolution.

XI (6). RESOLUTION TO AMEND BY-LAWS RE: COMMITTEE ON ETHICS

WHEREAS, It is apparent that many malpractice suits could be avoided if a higher code of ethics were obtained among the medical profession, and

WHEREAS, Under Chapter Five (5), Section Three (3) of the By-Laws of the Michigan State Medical Society, the Council serves as the Board of Censors of the Society, and

WHEREAS, Because of the many duties and the infrequent meetings of the Council, it has been unable to devote any considerable amount of time to this phase of their work.

BE IT RESOLVED, That Chapter Six (6), Section One (1) be amended by adding subsection f. "Committee on Ethics."

BE IT FURTHER RESOLVED, That Chapter Six (6) be amended by adding Section Eight (8), which shall read as follows:

Committee on Ethics shall consist of five members appointed by the President and with the advice of the Council. It shall be the duty of this Committee to advise the Council concerning questions of ethics. It shall investigate all questions of ethical nature upon the request of individual councilors or component county societies. It shall report the results of such investigations to the Council for their final approval. It shall attempt to integrate the work of this Committee with the Medico-Legal Committee of the State Society. It shall assist County Societies in setting up schemes of integration between their Ethics and Medico-Legal Committees.

REPORT OF SEVENTY-FIRST ANNUAL MEETING

THE SPEAKER: It will be referred to the Reference Committee on Resolutions. (See page 760 for report of Reference Committee.)

XI (7). RESOLUTION RE: STANDARDS FOR INTERNE TRAINING

DR. PHILIP RILEY (Jackson): I have the following resolution to offer:

"WHEREAS, The Council on Hospital Examination of the American Hospital Association requires an average of seventy-five patients per day in hospitals for approval for interne training, and

"WHEREAS, When such requirements are met with, three internes are allowed; and

"WHEREAS, Such requirements work an injustice on hospitals having between fifty and seventy-five patients, as below seventy-five patients they allow no internes and above seventy-five they allow three, therefore, be it

"RESOLVED, That the delegates to the American Medical Association from the Michigan State Medical Society introduce a suitable resolution to lower this standard for approval for interne training to fifty patients per day."

THE SPEAKER: It is referred to the Reference Committee on Resolutions. (See page 761 for report of Reference Committee.)

Are there any further resolutions?

DR. C. F. DeVRIES (Ingham): At the last meeting of the Ingham County Medical Society we were asked to submit the following resolution:

XI (8). RESOLUTION RE: LECTURES BY PHYSICIANS ON SOCIAL HYGIENE

WHEREAS the normal existence and happiness of all human beings must be of necessity intimately related to and very largely dependent upon a normal biologic relationship, and,

Further, the greatest glory of intelligent humanity lies in the appreciation to the highest degree of its sex, and

WHEREAS during the period of adolescence much misguided and harmful information is often presented to the developing individual, either male or female, often resulting in permanent harmful injury leading to subsequent serious incompatibilities, selfishness, or even to marked perversions, and WHEREAS it is factual that venereal infection is the greatest scourge afflicting the human race today, and by some authorities not even excepting malignancy the source of greatest anguish and suffering to mankind, and

WHEREAS instruction in biologic principles and normal sexual relationship and behavior, the dangers of venereal disease and its spread is all too frequently left in the hands of the uninformed, the emotionally unstable, or the bigoted, and

WHEREAS we feel that any problem of public health must per se regard these principles as basically fundamental to the welfare of the individual and society, and

WHEREAS lectures on social hygiene have been given by members of the Ingham County Medical Society to the tenth grade high school students for four years, and the Board of Education of the City of Lansing was the first to institute such a series of lectures, and

WHEREAS superintendents, principals, assistant principals, and teachers are very enthusiastic to have these lectures continued under the guidance of physicians, and

WHEREAS the students are receiving authentic medical education and instruction which is being manifested on the student body as a whole, i.e., a decrease in the number of school pregnancies, a decrease in venereal infection, and a closer understanding with school advisors, and

WHEREAS outside agencies are interested in similar lectures, i.e., Parent-Teacher Associations, Business Women's organizations, Social Service, college students, and Sunday School organizations, and

WHEREAS only physicians are capable of presenting these lectures,

THEREFORE BE IT RESOLVED:

Firstly, that the Ingham County Medical Society recommend to The Michigan State Medical Society the endorsement and adoption of similar educational lectures by interested physicians in various cities, towns, and communities.

Secondly, that a committee from the Michigan State Medical Society be appointed to adopt a uniform outline of instructions and have such printed.

THE SPEAKER: It will be referred to the Reference Committee on Resolutions. (See page 761 for report of Reference Committee.)

XI (9). COMMITTEE ON RESOLUTIONS RE: CO-OPERATION FROM GOVERNMENTAL AGENCIES

The Chair recognizes Dr. Robb, of Wayne.

DR. ROBB: Mr. Speaker, I have been listening with a good deal of interest to the recitation of the coöperation that the governmental processes of this state have given to this Society, and I feel that before we leave the matter of resolutions we should

develop, by a committee of this House, satisfactory resolutions commending the Governor and the administrative officers for their work in coöperating with the State Society. I know of no time in my experience in which they have so readily joined in such satisfactory and friendly coöperation, and I would ask that the House develop satisfactory resolutions to be sent to these officers of the state.

THE SPEAKER: Would you offer that as a motion, Dr. Robb?

DR. ROBB: As a motion.

THE SPEAKER: That a committee be appointed?

DR. ROBB: Yes, a committee of three appointed by the Speaker.

DR. CHRISTIAN: I second the motion.

THE SPEAKER: Motion has been made that a committee of three be appointed by the Speaker to draw up resolution concerning the remarks which Dr. Robb just made. The Chair would ask Dr. Robb to serve as Chairman of that Committee, Dr. Christian, and Dr. Curry.

The motion was voted upon and carried.

(See page 762 for report of Committee.)

THE SPEAKER: Are there any other resolutions or new business to come before this session?

DR. I. W. GREENE, of Shiawassee, read his prepared resolution.

XI (10). RESOLUTION TO AMEND BY-LAWS RE: PUBLIC RELATIONS COMMITTEE

WHEREAS, In the past the medical profession has been negligent in studying the relations between the profession and the public, and

WHEREAS, In the last year the special committee, known as the "Public Relations Committee" has served most effectively, BE IT RESOLVED, That Chapter six (6), Section 1, of the By-Laws of the Michigan State Medical Society be amended by adding a further sub-section, "Public Relations Committee."

BE IT FURTHER RESOLVED, That Chapter six (6) be amended by adding a further section which shall read as follows:

The Committee of Public Relations shall consist of nine members appointed by the President with the advice of the Council. It shall be the duty of this committee (a) To integrate and publicize all approved plans and projects emanating from the Council, Executive Committee and other standing and special committees of the Michigan State Medical Society. (b) To consider all plans and projects and make suggestions and recommendations to improving or changing such plans for integration and publicizing. (c) To develop further plans for better Physician-Public contacts.

THE SPEAKER: This will be referred to the Reference Committee on Constitution and By-Laws. (See page 760 for report of Reference Committee.)

Are there any more resolutions? Is there any new business? If not, we will proceed with the next order of business, the reports of Reference Committees.

XII. REPORTS OF REFERENCE COMMITTEES

XII (2) OFFICERS REPORTS

DR. CURRY: Our Committee has not had an opportunity to meet and I should like to have the privilege of making this report tomorrow morning.

XII (1). THE REFERENCE COMMITTEE ON REPORTS OF STANDING COMMITTEES

DR. FOSTER: The Committee on Standing Committee Reports has been broken up into four subcommittees, and whether or not they are ready to report I cannot say. Dr. Andrews was handling the report of the Legislative Committee.

LEGISLATIVE COMMITTEE [IX (1)]

DR. ANDREWS: We have not had an opportunity to convene and we are not ready to report. We shall bring in a report tomorrow morning.

COMMITTEE ON MEDICAL ECONOMICS [IX (3)]

DR. FOSTER: Dr. Catherwood, with the Committee on Economics, is in session now.

JOINT COMMITTEE ON PUBLIC HEALTH EDUCATION [IX (2)]

Dr. Dean Hart as the State Society's Representatives to the Joint Committee on Public Health Education.

DR. DEAN W. HART (Clinton): This committee has met and feels that the reports show a great deal of work by the Committees, and we wish to commend them on their work.

DR. FOSTER: Mr. Speaker, I move that the report of the Committee be accepted and approved.

DR. ANDREWS: I second the motion.

The motion was voted upon and carried.

DR. FOSTER: Dr. Spalding.

CANCER COMMITTEE [IX (4)]

DR. E. D. SPALDING (Wayne): I have two brief reports from the sub-committee reporting on the report of the Cancer Committee:

The general work of the Cancer Committee is to be commended, especially its intensive program of Cancer Education, with a series of lectures in various communities throughout the State for which lantern slides have been provided and Cancer booklets issued. These lecture series have been intensively organized.

Approval should be given of the action of the Cancer Committee in closely allying itself with the Joint Committee on Public Health Education, both having aims in common and the latter having wide facilities for the organizing and carrying out of the educational phases of the Cancer Committee's work.

The report as a whole should be accepted and approved.

DR. FOSTER: I move that the report of the Reference Committee on the Report of the Cancer Committee be adopted.

DR. WM. J. STAPLETON (Wayne): I second the motion.

The motion was voted upon and carried.

COMMITTEE ON PREVENTIVE MEDICINE [IX (5)]

DR. SPALDING (continuing): Second is the report on the Report of the Committee on Preventive Medicine:

The active work of the Committee with its three meetings in different parts of the State should be commended. Five of the six specific recommendations of this Committee should be approved, namely

A. Program for Child Health and Maternal Welfare by the State Health Department with the co-operation of the various County Societies, each County appointing an advisory committee of three to act in connection with the work in that county.

B. Formation of *County Health Units* to act locally purely in a directive and educational capacity, Federal Funds being available for such work.

C. Recommendation to the State Health Department that a Bureau of Tuberculosis be formed with the program of case finding, hospitalization and follow up care as outlined in detail in the Committee's report of a year ago.

E. Recommending that each county society have at least one monthly program a year on Preventive Medicine.

F. Also recommending that one day's program of each regional conference be devoted to Preventive Medicine.

A, B and E can be incorporated in a round letter to the Secretary of the County Societies urging and outlining these respective items. C could be referred to the State Health Department and F to the Chairman of the Regional Conferences.

D. Regarding the request by the Red Cross for

the approval of the establishment of First Aid Stations along trunk automobile routes with the training of local personnel in such measures. It is felt that such stations should be established in outlying districts where immediate medical aid is not available, but not in close proximity to centers of population where such emergencies can properly be cared for in regular channels. The various County Societies through their secretaries should be urged to coöperate and further this movement but should supervise the activities of such stations and have a definite voice in determining what points are appropriate for their establishment. It is distinctly understood that services rendered in such stations be in the nature of First Aid only.

With the specific modifications of Section D the report as a whole should be accepted and approved.

DR. FOSTER: Mr. Speaker, I move that the report of the Reference Committee relative to the Preventive Medicine Committee's report be adopted.

DR. CARL F. SNAPP (Kent): I second the motion.

DR. R. A. SPRINGER (St. Joseph): I would just like to ask a question. Personally I am not in favor of making doctors out of gasoline station attendants. Maybe I have the wrong idea about it. Our Society voted down the proposition of the Red Cross and I would like to have a discussion of this point.

THE SPEAKER: Is there any further discussion?

DR. A. V. WENGER (Kent): Is this report to be referred to a Committee?

THE SPEAKER: It has been referred and it is now back under the reports of Reference Committees. These are some sub-committees.

There is a motion before the House that is still open for discussion.

DR. CHRISTIAN: Dr. Springer just asked me to report that Ingham County Medical Society voted this down many months ago.

DR. GEIB: This proposition of the Red Cross was considered by the Preventive Medicine Committee and the suggestion was made by the Red Cross that at certain places stations to take care of accidents be established. The Preventive Medicine Committee felt that probably in certain districts in the northern part of the state, where it is sparsely settled, there might be a need, and the suggestion was that each local County Society be the one to determine whether or not they wanted such a set-up, and if in a certain county it is thought that it isn't necessary or needed, they do not have to comply with it. In other places it might be highly desirable. If it is it should be, as stated in the recommendations read by Dr. Spalding, under the supervision of organized medicine.

DR. A. G. SHEETS (Eaton): This matter came up in Eaton County some time ago and was disposed of in the manner that we thought it should be. It was voted down. We have no need for it in our county.

DR. SPRINGER: I move that that idea be incorporated into the resolution of the Committee, that the matter be left up to each Society as a whole.

THE SPEAKER: Then you will have to amend the motion.

DR. K. M. BRYAN (Manistee): This matter of the Red Cross was taken up in our county and first dismissed, and then, because of so much urging from our Social Welfare Department, we again took it up. Up in our county there are areas of twenty to thirty miles where there is no physician or nurse available, and they felt that many times a serious result from an accident could be avoided by the proper handling of a case. I know of a case of a man who was dead when he was admitted to our hospital, about a year ago, whom I think could have been saved had he been handled properly on the way in.

REPORT OF SEVENTY-FIRST ANNUAL MEETING

We took it up again and the physicians of our Society are instructing these people in these methods, and it is under the supervision of our Medical Society.

I might tell you also that I was down in Ohio last month and in Ohio they have these stations apparently all over the state.

DR. SPRINGER: I would like to have an amendment to the motion as quoted a minute ago.

THE SPEAKER: Do you offer the amendment?

DR. SPRINGER: I offer an amendment to the resolution stating that each county can or can not have the Red Cross stations, according to its own discretion.

DR. CHRISTIAN: I second the motion.

The amendment was voted upon and carried.

The motion as amended was voted upon and carried.

THE SPEAKER: Is there any other business or are there any further resolutions to come before this session?

XIII. MESSAGE TO DR. B. R. CORBUS

DR. LUCE: The absence of a man who has been long identified with the Michigan State Medical Society, who has given much of his time and energy, is recognized today. I would move that the Speaker of the House of Delegates send a telegram of regret at his absence and hopes for his recovery. Dr. B. R. Corbus, of Grand Rapids. (Applause)

The motion was severally seconded.

THE SPEAKER: The Chair believes there need be no discussion. All those in favor of the motion will say "Aye." Opposed, "No." The motion is carried. Mr. Secretary, you will so do.

Are there any other Reference Committees to report?

XIV. RESOLUTIONS ON DEATH OF DR. CARL F. MOLL

DR. GREENE: During the last year the Michigan State Medical Society suffered the loss of a man who had been a very valuable member, a man who had been President of our Society, and I feel it fitting that a committee be appointed to draw up suitable resolutions in regard to the death of Dr. Carl F. Moll, of Flint.

DR. CHESTER: I second the motion.

The motion was voted upon and carried.

THE SPEAKER: The Chair will appoint a committee of three, Dr. Greene as Chairman, Dr. Chester, and Dr. Wenger.

Are there any further reports from Reference Committees?

XII (3). REFERENCE COMMITTEE ON REPORT OF THE COUNCIL

The Chair will recognize Dr. Insley, Chairman of the Reference Committee on the report of The Council.

DR. S. W. INSLEY (Wayne): Fully appreciating the many fine things accomplished by The Council, such as the Filter System arrangement, integration, Public Relations Committee, and especially the fine contact work with the state administration, your Reference Committee on the Council Report approves the record of the year's work and, since the various activities are being reported by the many unit committees, we feel that the main function of this Committee is to make the following suggestions:

First, that the Council, because of increased activities, should meet oftener than at present.

Secondly, State Night meetings should be scheduled so as to relieve the burden on the Councilors.

Your Committee begs to move the acceptance and adoption of this report.

DR. W. J. CASSIDY (Wayne): I second the motion.

The motion was voted upon and carried.

THE SPEAKER: Are there any further reports from Reference Committees? If not, the Chair will entertain a motion to recess.

DR. SPRINGER: I so move.

DR. CHRISTIAN: I second the motion.

THE SPEAKER: I would remind you that no business, without the entire consent of the House, may be brought up in the session as new business tomorrow.

The motion to recess was voted upon and carried, and the meeting recessed at 4:10 o'clock.

Tuesday Morning Session

September 22, 1936

The meeting convened at 9:15 o'clock, Dr. Frank Reeder, Speaker of the House of Delegates, presiding.

THE SPEAKER: The third and last session of the House of Delegates will please come to order.

THE SECRETARY: Mr. Speaker, I hold fifty-six signed roll call slips, which constitute a quorum for this, the third session of the House of Delegates. If some member will move the adoption of the roll call we shall proceed.

DR. F. T. ANDREWS (Kalamazoo): I so move.

DR. DEAN W. MYERS (Washtenaw): I second the motion.

The motion was voted upon and carried.

XV. TRANSFER OF HILLSDALE COUNTY FROM SECOND TO THIRD COUNCILOR DISTRICT

DR. H. A. LUCE (Wayne): At the last meeting at the Soo there was a certain matter unfinished in connection with Hillsdale's request to become a part of the Third Councilor District. The only way in which that can be referred to this morning will be by unanimous consent of this House. Mr. Speaker, I request that this House grant the request of the delegate from Hillsdale.

DR. L. G. CHRISTIAN (Ingham): I second the motion.

The motion was voted upon and unanimously carried.

THE SPEAKER: Will the delegate from Hillsdale, or that district, please present his case before the House?

DR. R. L. WADE (Branch): The delegate from Hillsdale appears to be absent this morning. There was a request by Hillsdale to become a member of the Third District, and this was taken up last year but was left over to be settled at this time, and it would be very agreeable with Hillsdale and the Third District for them to become a member of the counties of Branch, Calhoun, and St. Joe. I move that this permission be granted to Hillsdale County.

DR. CHRISTIAN: I second the motion.

The motion was voted upon and carried.

THE SPEAKER: The Chair will entertain a motion to revert to the regular order of business.

DR. JOHN L. CHESTER (Wayne): I so move.

DR. W. J. CASSIDY (Wayne): I second the motion.

The motion was voted upon and carried.

XVI. ANNOUNCEMENT RE: THE 122 EXHIBITS, AND INVITATIONAL GOLF

THE SPEAKER: I desire to announce, before we go on with our routine of business, that it is very important, after you have finished this session—your officers would so request—that you spend some little time at least in acknowledging and visiting the seventy-two technical exhibits. I would like you to know that they are carrying a good part of this burden and we would like for you, as delegates, to show your appreciation to these technical exhibitors and their exhibits. We feel sure you will inspect the 50 scientific exhibits.

I also want to call to your attention that this afternoon, invitational golf at Detroit Golf Club has been arranged for members of the State Society, and the Wayne County Committee has taken much time to arrange this party. Some very beautiful and splendid prizes to be awarded this afternoon. It doesn't mean that you have to be a good golfer; the dub will stand just as much chance of winning a prize as the good golfer.

We shall now proceed with the regular routine of business. I shall ask for a supplementary report from the Council, if any.

DR. HENRY COOK (Genesee): Mr. Speaker, there have been no matters referred to the Council for consideration, and our previous report completed the business transacted by the Council.

THE SPEAKER: I shall ask for supplementary reports from Reference Committees.

The first will be the report of the Reference Committee on Council Reports.

DR. INSLEY: No further report has come to the Reference Committee and we therefore have no further report to make at the present time.

THE SPEAKER: I shall ask for the Reference Committee's report on the Reports of Officers. Dr. Curry!

XII (2). REFERENCE COMMITTEE REPORT ON OFFICERS' REPORTS

DR. G. J. CURRY: Your Reference Committee on Officers' Reports met September 21, 1936, with Doctors Hansen, Clinton, Snapp, Toshach and Curry present, and Dr. O'Donnell absent.

SPEAKER'S ADDRESS (III)

Report on Speaker's Address: We accept unanimously and adopt our Speaker's Address, commending especially his suggestion of closer contact between delegates and their local societies, particularly with reference to the affairs of the state organization, and his pertinent remarks concerning the election of delegates at an early date so that they may be better acquainted with their local county problems. We also suggest that each member of the House of Delegates obtain and read a copy of the poem "A Builder" before returning to the next session.

Mr. Speaker, I move the adoption of this report.

DR. LUCE: I second the motion.

The motion was voted upon and carried.

PRESIDENT'S ADDRESS (IV)

DR. CURRY: The President's Address: We unanimously extend our compliments to Dr. Grover C. Penberthy and accept and approve the contents of his address in its entirety.

I move the acceptance of that report.

DR. CASSIDY: I second the motion.

The motion was voted upon and carried.

PRESIDENT-ELECT'S ADDRESS (V)

DR. CURRY: The address of the President-Elect: We accept and approve Dr. Henry E. Perry's address, especially his endorsement of the post-pay-

ment plan for borderline medical cases, and recommend that such plan or plans be referred to the Economics Committee for further study and early report.

I move the adoption of that report.

DR. PLAGEMEYER: I second the motion.

The motion was voted upon and carried.

DELEGATES TO A. M. A. (VII)

DR. CURRY: The report of the delegates to the American Medical Association, Dr. J. D. Brook: We extend our hearty thanks for this excellent summary of the transactions at the 1936 meeting of the American Medical Association.

I move the adoption of this report, Mr. Speaker.

DR. CHESTER: I second the motion.

The motion was voted upon and carried.

DR. CURRY: I now move the adoption of this report as a whole.

DR. WESSINGER: I second the motion.

The motion was voted upon and carried.

THE SPEAKER: The next order of business is the report of the Reference Committee on Standing Committees.

XII (1). THE REFERENCE COMMITTEE ON REPORTS OF STANDING COMMITTEES

DR. FOSTER: The report of the Legislative Committee will be given by Dr. F. T. Andrews, of Kalamazoo.

LEGISLATIVE COMMITTEE [IX (1)]

We, the undersigned Committee, recommend the acceptance and adoption of the Legislative Committee's Report in its entirety, excepting that Section Three shall read as follows:

"3. Request county medical societies to quietly obtain information on candidates and supply same immediately upon request to the Executive Office of the M.S.M.S., also a copy shall be retained in the file of the County Medical Society."

We commend the Committee for their intensive study of this problem and thank them for their efforts.

F. T. ANDREWS, Kalamazoo, *Chairman*

E. A. STICKLEY, Ottawa

O. D. STRYKER, Newaygo

DR. ANDREWS (continuing): I move the acceptance and adoption of this section.

DR. O. D. STRYKER (Newaygo): I second the motion.

The motion was voted upon and carried.

DR. ANDREWS: I move that this report be accepted and adopted in its entirety.

DR. CHESTER: I second the motion.

The motion was voted upon and carried.

MEDICO-LEGAL STUDY COMMITTEE [X (8)]

We, the undersigned Committee, recommend the acceptance and adoption of the report of the Special Committee to Survey the Medico-Legal Defense Fund in its entirety, excepting that Section Three shall read as follows:

"3. That no fee shall be paid to the attorney of this fund. If in the defense of a case should he be retained by and represent a commercial company."

We commend the Committee for their intensive study of this problem and thank them for their efforts.

F. T. ANDREWS, Kalamazoo, *Chairman*

E. A. STICKLEY, Ottawa

O. D. STRYKER, Newaygo

DR. ANDREWS: I move the adoption of this section.

DR. STRYKER: I second the motion.

The motion was voted upon and carried.

DR. ANDREWS: Mr. Speaker, I move the

REPORT OF SEVENTY-FIRST ANNUAL MEETING

adoption and acceptance of this report as amended.

DR. STRYKER: I second the motion.

The motion was voted upon and carried.

DR. FOSTER: The other Standing Committee's report still to be heard is that of the Economics Committee, to be reported upon by Dr. Catherwood.

COMMITTEE ON MEDICAL ECONOMICS [IX (3)]

DR. CATHERWOOD: Your Sub-Committee on Reports of the Standing Committees met all afternoon yesterday. There are several sections to this report.

SUBCOMMITTEE ON INDUSTRIAL MEDICINE [IX (3b)]

The Report on Industrial Medicine: We advise acceptance of this report. In the report there was a resolution, as follows:

WHEREAS, It is conceded that an analytical evaluation of all phases of Industrial Medicine would be to the best interests of all concerned, and

WHEREAS, The problem is one nation-wide in scope, therefore, be it,

RESOLVED, That the Michigan State Medical Society instruct its delegates to the A.M.A. to introduce, at the next meeting of the House of Delegates, a resolution embodying the essential facts involved, requesting the A.M.A. to proceed at once, with a nation-wide survey.

DR. CATHERWOOD: I move that this resolution of the Industrial Medicine Section be adopted.

DR. LUCE: I second the motion.

THE SPEAKER: Is there discussion?

DR. CASSIDY: I don't see how you can put this off on the shoulders of the American Medical Association. Each state is operating under a compensation law peculiar to that state. I don't see why the State of Michigan should try to put this on the American Medical Association. Let the State Society settle its own things within its own state. The compensation laws of Michigan are on an entirely different basis from the compensation laws of Ohio, New York, Minnesota, and the other various states. How is the American Medical Association going to correlate and adjust this thing when each state regulates its own compensation laws? It seems to me that it is up to us in this state to regulate the laws and the practices of the profession in this state.

Let's not pass the buck, but handle it where it belongs, locally. We are all howling about national government in business and the national government assuming states' rights. The same thing is going to take place in the American Medical Association unless you are careful. Let each state handle its own problem within its own state consistent with its own laws.

Thank you.

THE SPEAKER: Is there further discussion?

DR. LUCE: Mr. Speaker, I agree entirely with Dr. Cassidy with regard to the matter, but in a conversation with the subcommittee of the Committee that introduced the resolution the fact came out that this is a matter of study and evaluation of the interests of the respective parties concerned. It does not require a recommendation. We are all frank to admit that the insurance people have certain rights. The employee has his rights; the manufacturer has rights and the doctor has rights. The medical profession has always been fair, and this can only be arrived at in a fair and honest way by a careful study and evaluation of the basic principles underlying this line of treatment.

THE SPEAKER: Is there any further discussion?

DR. PINO: We have given all of these points considerable thought. We know that it would be better, if possible, to settle this matter for Michigan in Michigan. We know, however, that in Michigan

there is not enough money—I mean so far as the Economics Committee is concerned—to be able to bring in any report that is of value to this House of Delegates.

Now, if this House of Delegates wants to set aside several thousands of dollars for a proper study, so that we can name a commission and give to that commission an executive secretary to study this problem adequately, then we can do this as the State of Michigan. That is the only way it can be done. We had no other alternative except to submit the afore-mentioned resolution.

The motion was voted upon and unanimously carried.

SUBCOMMITTEES ON POST-GRADUATE COURSES FOR GENERAL PRACTITIONERS [IX (3a)], and ON INSURANCE EXAMINATIONS [IX (3e)]

DR. CATHERWOOD: The Committee has considered the reports on Postgraduate Medicine, and on Insurance Examinations, and approves them, and I move their adoption.

DR. A. P. BIDDLE (Wayne): I second the motion.

The motion was voted upon and carried.

DR. CATHERWOOD: One other sub-committee, that on Relief Medicine:

SUBCOMMITTEE ON RELIEF MEDICINE [IX (3d)]

After careful consideration of the report of the subcommittee on Relief Medicine of the Economics Committee we advise acceptance and adoption of the report. We suggest further that this proposal be carried forward in cooperation with the allied professional groups, such as pharmacists, nurses, dentists, hospital associations and morticians.

I move the acceptance of this report.

DR. L. J. HIRSCHMAN (Wayne): I second the motion.

DR. GREENE: It seems to me that this is a subject which needs further discussion by the House of Delegates, more than merely accepting this report. I have attended some of the committee meetings of this sub-section; I have listened to the report and I still don't know the arguments pro and con.

Apparently it comes down to this: Do we want a centralized form of control with a medical coordinator in Lansing or do we want local control? Apparently this is not entirely clear in everyone's mind. There are undoubtedly arguments on both sides. I believe the sub-committee itself is not entirely in accord on this report. I believe that the Economics Committee is not entirely in accord on this. It is quite possible that in some counties a medical coordinator in Lansing would work to a greater advantage; in other counties your local control would work better.

I think that both Dr. Insley and Dr. Pino and the other members of the Committee should tell us more about this situation. I think there has been a little tendency in this meeting of the House of Delegates to pass over the reports of committees too lightly, without perhaps entirely understanding what we are voting on, and I would like a further elaboration of this question before I make up my mind how I stand. (Applause)

THE SPEAKER: Is there further discussion on this?

DR. PINO: Mr. Speaker, we have been a year considering this problem after it was given to us last year at the Soo meeting. There are a great many things that we have had to think over and it is not easy at all to condense into any short report all of the subject material that is bound to come up in considering so important a matter as this, and it is going to take just a little time this morning for us to lay before you some of the things that we have thought about, and I want to

be given that time, and we will make it as short as possible.

I first want to read to you a minority report that was just handed to me from the Sub-Committee on Relief Medicine:

Minority Report—Subcommittee on Relief Medicine

To the Economics Committee of the Michigan State Medical Society:

Believing that the entire feeling of the question of Relief Medicine has not been covered by the report of the Sub-Committee on Relief Medicine, I beg to submit the following minority report:

1. The State Administration, of whatever party it may be, will not spend millions on relief without definite state control.

2. In any type of centralized medical control the organized profession in Michigan should have a voice in the shaping of policies, and a hand in the problems of administration.

3. This society has, through its representatives, initiated, and implied approval of a concerted effort on the part of all the large groups on this problem. These other groups, but one, have already officially approved the tentative plans submitted by this Society, and that other is waiting for final approval from this body. Such plan includes free choice, adequate payment, civil service for administrative personnel and control of professional standards by the profession involved. This plan, which has been submitted in writing to, and regularly approved by, all but one of these groups (and tacitly approved by that one) except our own, will have greater political weight than any plan backed only by the Michigan State Medical Society.

4. Adequate representation on any state administrative body does not deny or negate any or all local or district regulations as outlined in the majority report, but rather affirms, coördinates and assures their ultimate performance.

5. This Society is committed to the principles of integration, the filter system and a closer knit state organization. It has approved a medical coördinator at its Sault Ste. Marie session. Any system of medical relief which gives the State Society neither direction nor control negates such principles. Due allowance for regional differences strengthens, rather than weakens, the position of the State Society.

6. This Society is unalterably opposed to State Medicine. Only by definite control or direction of the medical policies of the State Administration by this Society can the encroachment of the lay worker be prevented and forestalled. The above mentioned program insures this control or direction to the State Society.

7. Experience in other states indicates that the principles outlined above are not inimical to the public weal and that they can be embodied in the statutes.

Because of these facts, it is my conviction that the Economics Committee should in its report to the House of Delegates urge adoption of the plan which has been submitted to and approved by the allied health groups, a copy of which is herewith attached.

ERNEST W. BAUER

Member Sub-Committee on Relief Medicine

DR. PINO (continuing): Now, in order that you may understand something of the logic that we have had to follow, I want to take up some of these things. In the first place, last year the report that was submitted to the House of Delegates was in part as follows. I would be willing to read it all,

but this is the only part that you will be particularly interested in as relating to this report this year:

"The administration of medical relief should be directed through a state-wide organization. This organization should be a division of a general relief agency with the administrative aid of a Medical Director. A welfare agency should also have a professional advisory board composed of physicians, dentists, pharmacists, nurses and hospital executives. The moneys for medical relief should be furnished through state finances aided where possible from county sources and subsidized, if necessary, by federal contributions.

"A competent representation or committee of the Michigan State Medical Society should be appointed immediately and empowered to confer and advise with the appropriate welfare officials so as to work out the proper administrative technical and distributive machineries of these medical suggestions and recommendations."

That report is signed by Drs. Stanley W. Insley, Chairman; Harold A. Miller, T. K. Gruber, and V. M. Moore.

Now, going down a little bit further, in order that you may hear a little of the discussion Dr. Marshall, as Chairman of the Committee, made these remarks:

"Your Committee approves of the report of the subcommittee, but we do desire a full discussion of the following points:

"1. Is the budget as presented acceptable as a tentative schedule?

"2. What shall the method of administration be? Is the plan of the sub-committee entirely acceptable? That is, administration by the present welfare board, or would a separate administrative agency be more desirable, or should administration by a Deputy Administrator of Health, under the State Department of Health, be considered?

"(Shall we recommend a uniform plan of medical relief in the state? Our study in ten counties leads us to the conclusion that administration by uniform method throughout the state is highly advisable. We further recommend that a medical man be placed in charge of such a program. Such a physician should have the point of view of the profession. He should see eye to eye with medical men in the problems of administration of medical relief."

Now I want to turn over to the report of the Reference Committee and read you its report. It is the report of the Reference Committee, Dr. Sladek, Chairman:

"Your Committee concurs with the recommendations of the sub-committee report and feels with them that the administration of medical welfare relief should be in the hands of a special relief organization such as the State Welfare Department. Medical relief should be administered by a qualified Medical Director and in such a manner as to not in any way infringe upon the personal physician-patient relationship."

Then this was submitted to a vote, and these are the remarks of the Speaker:

"Is there any further discussion? Those in favor of that portion of the report and its acceptance and adoption say 'Aye.' Opposed, 'No.' It is carried."

When the Economics Committee is given a certain job we have certainly some respect and consideration to be given to the House of Delegates that gave us that job, and we have had to consider these things. I am simply carrying you along as we have had to see and consider these things.

(Lantern Slide) Last year the *Detroit News* carried an article, including this outline: "How Welfare Bill Would Re-organize Michigan's Institutional Control," showing down through the various divisions that would be cared for, except one having to do with welfare throughout the state.

(Lantern Slide) I want to show you what has been proposed to fit into that other picture, one in which there is a Medical Director who shall, in co-operation with the dental division, with hospitals, with pharmacy, with nursing, with the mortuary division, the statistical division, and so on, be able to have medicine represented.

REPORT OF SEVENTY-FIRST ANNUAL MEETING

When I come, then, to the point of saying that I do believe that it might be better to have an administrator of some of these things appointed by the medical profession, it is for a reason. When we learn that in the counties of the State of Michigan—I haven't these figures just right but they are something on this order; I could get them—medical care for an indigent individual ranges from \$2 to 5c. When one county is spending \$2 for the care of the indigent sick and another is spending five cents, knowing the cost of medical care you may be certain that in some of the townships and counties of the State of Michigan rather poor medical care is being given. We feel that we can, as a medical profession, criticize other things in life. We say that the election of judges, instead of the appointment of judges, is not a good thing. We look at the legal profession and think that they should somehow do some things different from the way they are doing them.

Now I want to refer to Oakland County and what they have done, as one example. We have close at hand, as a part of Detroit except that it is in Oakland County, Hazel Park, a village (I say village because it is not incorporated) of 16,000 people or thereabouts. During the depression house after house was empty, house after house had no doors, windows were broken out, and people came along with what little they had in a baby carriage or a wheelbarrow or an old Model T and went into any house and lived, wherever a door happened to be broken down and where nobody lived, and in that community there was a family doctor, and because of the set-up that works in Oakland County those people could call the doctor and the doctor was paid.

If you want the details of the way they do that in Oakland County you can have those details. They are open and above board. I do not know but what as good a system exists in Jackson and in other counties, in Flint and in Grand Rapids. It does not exist in Wayne, and it does not exist in many counties. I use Oakland instead of Genesee and Jackson because they have all the figures there, definitely set up, and they can not be contradicted, and you can inspect them at any time.

I want to say this: Pain, plus propaganda, is Spain today. Pain plus propaganda is causing almost a revolution in France. Pain plus propaganda brought Russia to where Russia is today. It takes but a little pain and no reason at all to cause people to become radical.

I refer you back to the Committee's report and the action of the House of Delegates last year at the Soo, and I advise, as Chairman of the Economics Committee of the Michigan State Medical Society, that you consider your action carefully last year and act upon it, or that you put aside this report, turn it over to The Council, and let it bring in a report later. (Applause)

THE SPEAKER: Is there any further discussion?

DR. FREDERICK A. BAKER (Oakland): Mr. Chairman, Ladies and Gentlemen of the House of Delegates: I would like to discuss this thing a little bit and repeat some of the points that already have been called to your attention.

The sub-committee's report on Relief Medicine which offers the principles which are to be included in a proposed revision of medical legislation contemplates a change in the basic laws regarding poor relief. This sub-committee report, I want to point out, has never been presented to the Committee on Economics. Why? I do not know. I do want to commend the sub-committee, however, on the report presented, so far as it has gone. However, I do not believe it has gone far enough, and in any set-

up it seems to me there should always be some control above. It is simply a business proposition. If you and I were setting up a business we certainly would conduct that business with some responsible head to tell those who are operating it below us what general principles they must follow.

I am rather concerned that the sub-committee should present such a program as it has presented on simply a county line. This is nothing more, gentlemen, than a county program. There is no control over the counties. I think Dr. Pino has rather graphically pointed out to you what it might involve, what might follow. I don't think, personally, that we should have a much different organization from what we have today in the several counties without control above. I wonder what would happen in Wayne County.

I also want to point this out: I sat in with the sub-committee listening to its discussions. The committee was in accord in all respects except on this one point: Shall there be any control from above in the matter of supervision over the several counties?

I gained the impression, gentlemen, that this sub-committee was being dominated entirely by Dr. Insley. I admire Dr. Insley a great deal. I want to compliment Dr. Insley on the amount of work, the time and the care that he has devoted to this work. But I don't believe that there has been a meeting of minds, gentlemen, in that committee.

Dr. Pino referred us to the action of the House of Delegates last year. I want to refer you to your handbook, on pages 68 and 69, Item No. 2 under SERA Medical Care:

"Your Committee discussed this subject and studied efforts of various county and state medical societies to devise plans to provide medical care to unemployed and employed on relief and WPA. A sub-committee contacted the SERA Administrator in Lansing on two occasions to discuss the essential features of certain successful programs already in operation, and to stress the necessity of a medical adviser to act as coordinator of statewide ERA medical activities."

On the following page, 69:

"The House of Delegates of the Michigan State Medical Society recommend to the SERA that a medical adviser be employed to coordinate the ERA medical activities of the State, and that the Michigan State Medical Society offer its help to obtain the best doctor of medicine available for this work.—Respectfully submitted, Special Contact Committee to Governmental Agencies by Henry Cook, M. D., Chairman, B. R. Corbus, M.D., H. H. Cummings, M.D., L. Fernald Foster, M.D., T. K. Gruber, M.D., C. R. Keyport, M.D., Grover C. Penberthy, M.D., R. H. Pino, M.D."

I submit that to you. I should like to have Dr. Insley discuss it.

THE SPEAKER: Is there further discussion?

DR. CASSIDY: Mr. Chairman, it seems to me we have lost sight of the basic principles in this connection.

It seems that this Society should do something concrete besides study. It should act—get a decent basic policy on the average practice of medicine in this state and drive it through. There is no use studying this thing all the time, or studying what the other states are doing. We are not interested in what California is doing 3,000 miles away. We are interested in how the medical profession is earning its living and how they are practicing medicine in the State of Michigan, and the sooner we realize that, instead of running all over the world, to England, Germany, and Russia, studying their problems, the better off we will be. We are wasting time and money, and it isn't going to take \$3,000 to tell the average individual what kind of medicine to practice. It takes a little common horse sense and intestinal fortitude, that is all it needs, and I think it is high time that this Society go on record to do something and not to study all the time and report and report and report, which reports are only filed and refiled.

THE SPEAKER: Is there further discussion?

DR. CHRISTIAN: I know nothing about this problem, but it seems to me that the House of Delegates is setting a bad example, a bad precedent, to adopt a sub-committee report that has not been submitted to the parent committee. In other words, we are going to allow it to go out of bounds. I object to this on that basis alone. I am not familiar enough with the debate to say whether the sub-committee is right or wrong, but I feel that it was the duty of that sub-committee to report to the Committee on Economics, and have that Economics Committee thrash this out.

Dr. Pino, will you correct me if I am wrong? Have you had a chance to go over this with your Committee?

DR. PINO: There has been no chance.

DR. CHRISTIAN: Then I object to it and I believe we are going out of bounds by even considering it, and it should be killed now.

THE SPEAKER: Is there further discussion? If not, are you ready for the question?

DR. INSLEY: Mr. Chairman, Members of the House of Delegates, and Guests: I will attempt to make this talk as practical and short as possible. I will try to take up some of the arguments, one by one, as they occur to me.

First, concerning this report of last year. At that time, if you gentlemen recollect, the ERA was still in effect. The recommendations which were made at that time and which were adopted by the House of Delegates were referred to the ERA because that was the organization in which rested relief care at that time. Those were made as suggestions. A committee was appointed to contact the SERA in an endeavor to complete the program, and until the present time the State Emergency Relief Commission has done nothing about it. Whether that is an argument for or against state control I will leave for your own minds to decide.

Now then, getting into the report itself. As Dr. Baker pointed out, I think everyone was thoroughly in agreement with every single one of the principles laid down in the report yesterday. The sharp difference of opinion concerned state or local. It occurred to me that local control might be best. I can't understand some of the sharpshooting at this thing on the basis of a difference of opinion over state or local control. The first paragraph says, if it is read and followed carefully, that "The following principles are to be included in any proposed revision." There is nothing there with which anybody, I think, can find fault. Whether there may have to be a few additional steps, that may well be, but are we to put ourselves out on a limb and ask for state supervision before, possibly, the time is absolutely necessary?

I would like to read a couple or three of these principles:

"1. Welfare officials in the local district or county shall provide medical care for sick persons whenever necessary, providing they are on direct relief." I don't think there is a man in this House who would object to that—"on direct relief."

"2. Such persons in need of health care shall be attended by and receive such care from their own family physician, or physician of their own choice in so far as practical." Again I think there is not one man in this House who would be in any disagreement with that.

"3. Payment for approved services shall be made in accordance with a scale of fees agreed upon in advance by local welfare officials and representatives of the medical profession."

Now then we get into a factor here, and it is a combination of the present Advisory Board, if you will, under the ERA, and the present Medical Filter Board, as has been worked out in the past year, in which we say:

"There shall be created in each local district or county welfare unit a Medical Advisory and Filter Board composed of representatives from the organized medical associations. Members of this Board shall serve without pay or compensation."

That was put in there because I feel, and I think many of the men here do, that after all, doctors should have some voice in medical policies, medical discipline, if you will, and the determination of medical necessity.

Then, to further integrate this program, that "The local Welfare Commission or officials shall appoint a local county medical officer who has been approved by the local advisory board." The whole program is practically in the hands of the profession itself.

I don't think that even some of the men who disagree with me on one policy will attempt to make a fight on any of those; I think we are very thoroughly in accord. The one disagreement, as it shows up, is whether or not state control is desirable. I just happen to feel that it is not.

In furtherance of this argument I wish I could have Dr. Pino's second lantern slide shown on the screen.

(Lantern Slide) I give you here, gentlemen, what has probably been one of the drawbacks to relief administration today, relief administration in general. It develops into a tremendous, top-heavy, expensive, complicated piece of machinery. Somewhere between the time the patient receives relief, whether it is in food or whether it is in medicine, there is a tremendous amount of expense, sometimes duplication, and certainly in the minds of many people with experience in relief a loss in efficiency, and I can further that argument by saying that practically every relief administrator that I know says that it is the policy of the various parties today to urge further decentralization of relief. I think that in every thinking man's mind such an approach to the problem is highly desirable.

I grant that maybe a State Supervisor or Administrator may be desirable. That is up to the House of Delegates to decide. The House of Delegates has a perfect right to make its own choice on that. My only fear is of excessive supervision.

I would like to take one little chance to correct a misapprehension, possibly, that this report was held in my hands and I refused to turn it out and refused to put it through the Medical Economics Committee. I think there is a distinct misunderstanding of how the situation arose.

We have been going around the state for a long time and spending plenty of time and effort trying to get the true background on the future relief policy of the state as a whole. That report couldn't be written ten months ago or six months ago. Two days before this meeting was held I spent time both in Muskegon and in Lansing. The sub-committee met on Sunday afternoon and, as was pointed out, there was considerable argument. The Medical Economics Committee was to meet on Sunday night, and so far as I know they held no formal meeting. Despite the fact that no formal meeting was held, pressure was put on the sub-committee for a report. I turned the report in. What more could I do? I submitted it as written because there was no formal meeting of the Medical Economics Committee held that night, to my knowledge.

I might, in answer to some requests of various doctors around the state (this has nothing to do with our report), tell them that yesterday afternoon I was finally able to complete the 1936 break-down on the afflicted children and crippled children's costs. I have them over here on a board for two fiscal years, 1934-35 and 1935-36. There was a question brought up as to the difference in cost between

REPORT OF SEVENTY-FIRST ANNUAL MEETING

hospitalizing such patients in local communities and in university hospitals. I submit the report. It is broken down so far as necessary, I think, for clear understanding. It will be here, gentlemen, for the rest of the morning, if any of you care to see it.

Thank you.

Dr. Riley took the Chair.

THE VICE SPEAKER: Is there any further discussion on this motion?

DR. PINO: I want to clarify a few points. About the report to the Economics Committee: I asked three or four weeks ago that a report be prepared in order that I might report to the Economics Committee and in order that the Economics Committee might be able to report to the House of Delegates, and the sub-committee was to have met in a week's time. A date was set. Notices were sent out and then the meeting was cancelled and set over for one week more, and then the date was changed and the date was set for last Sunday night. Then I had to set the time for the Economics Committee meeting at Sunday night, but Sunday came along and discussion followed discussion into midnight Sunday, and yesterday when I was supposed to be here to give the report it was still being worked on. How could that ever be brought before the Economics Committee? For that reason I believe this should not be acted upon, that we are duly bound to follow the report of the House of Delegates of last year until some further conclusion is arrived at.

THE VICE SPEAKER: Gentlemen, midnight is drawing nigh! (Laughter) Is there any further discussion?

DR. O. G. JOHNSON (Tuscola): I have listened to this discussion this morning with a great deal of interest and both sides seem to be viewing with alarm the conditions that confront us with regard to this indigent care. I wonder if you men know that there is one county in the state which solved this problem three years ago and solved it satisfactorily.

The care of the indigent in our county is entirely in the hands of the medical profession. It is taken out of politics. And the fact that it is becoming more popular and more favorable, not only with the doctors but with the Board of Poor Commission in our county is proof that it is working satisfactorily.

We went to our County Poor Commission with this proposition and we said to them, "We will take the cost of the care of the indigent for five years and strike a balance, and we will care for the indigent in this county for that sum." After several meetings we arrived at an agreement whereby, for a lump sum, we were to care for every patient who came to us.

There are no indigent in our county, technically. When a patient comes to us we make a charge, and if at any future time this patient is able to pay, we have the right to collect from him. On the first day of every month the lump sum (which has been divided into twelve parts) is placed in the hands of the Secretary of the Society, and each physician in the county who is in good standing in the Society gets an equal share, regardless of how little or how much work he has done. There is no bookkeeping other than our ordinary bookkeeping that we do in our office, and in many cases in the last three years I have been able to collect from people who looked, at the time I did the work, as though there were no chance of ever collecting from them.

This plan has worked out so well that one year ago the hospitalization of patients was placed on the same basis.

No one is refused, everyone is satisfied, and we have no trouble in collecting our bills. There are no bills to collect from the county.

You people have been here for three years discussing and holding meetings, and you have gotten nowhere yet!

Dr. Reeder resumed the Chair.

THE SPEAKER: Is there any further discussion? It is the opinion of the Speaker, inasmuch as we have been for nearly two hours on this one subject, and if there is no objection on the part of the assembly, that further discussion on the subject should be limited to a minute and a half.

The Chair recognizes President-Elect Perry at this time.

DR. PERRY: Mr. Speaker and Members of the House of Delegates: It seems to me that there is a lot of confusion here that can't very well be straightened out in this meeting and I would suggest that this be referred to the next Committee on Economics and have it reported back to the Executive Committee of the Council for final decision and action.

THE SPEAKER: There is a motion before the House, and we are still under the head of discussion.

DR. CATHERWOOD: I just want to take one minute to clarify the position of the Reference Committee on this Sub-committee's report. We were not aware, when this report was given to us, that the sub-committee report had not been discussed by the Economics Committee. Neither were we handed a minority report for our consideration. We had a report given to us. We found absolutely no objection to that report so far as it went: "The Sub-committee on Relief Medicine offers the following principles to be included in the proposed revision of medical relief legislation." We found no objection to those principles laid down. We felt that these suggestions were excellent because they gave control of medical relief to the physicians or the Medical Society of the county.

You have heard that we have been discussing this thing for three, four, or five years without getting anywhere. Here are some principles laid down by this Committee which we thought were sound. Now then, up comes the discussion: "Well, the state won't hand out all this money without some central control." That is another problem. These principles laid down are sound. Everybody agrees with them. Therefore your Committee voted that these should be accepted and adopted. That is our reason. If we are going to start, here is a good start. Here are some excellent principles to start with. If they aren't sufficient, why not change them later on, as the necessity arises?

DR. GRUBER: If I may have a word on the report, I happen to be one of the members of the Committee that signed the report. I am going to admit that we were a little late with the report, but just the same we have been doing a great deal of talking and studying of the question.

Along about last winter certain things happened along the same line, and I wrote a letter to some of the members of this organization, and from one of the members I had a nine-page reply. I haven't read it all yet. I am still not convinced that state control is the proper set-up, and it is going to be awfully hard to convince me, and when it finally seemed that we were going to be able to agree on county control I was very much pleased.

I am sure that, had this sub-committee's report recommended state control there would have been none of this discussion this morning at all, so that the wish has been father to the thought on this.

If we are going to have state control (and five years from now I will be saying "I told you so!"), we are going to have state medicine saddled on us as nicely and as neatly as anything can possibly be done.

REPORT OF SEVENTY-FIRST ANNUAL MEETING

THE SPEAKER: The Chair feels that this has been well and thoroughly discussed. Are you now ready for the question? The Chairman will read the question.

DR. CATHERWOOD: The Reference Committee on this report advised the acceptance and adoption of this committee's report, and we suggest further that this proposal be carried forward in cooperation with the allied professional groups, such as pharmacists, nurses, dentists, the hospital association, and morticians.

DR. LUCE: I apologize for not understanding thoroughly upon what we are voting. Will you explain to us, please, in language of one syllable words, so that I may understand?

THE SPEAKER: The Chair begs to announce that he doesn't believe that he can repeat this, consequently he has asked the Chairman of the Committee to restate the question. Still it is not clear, do I understand? It would seem to me that an explanation would involve the entire discussion of this morning, plus the reports of the committees.

DR. HIRSCHMAN: I seconded the motion to adopt this report in order to bring it up for discussion. Gentlemen, I ask that this be brought up for a vote and that you kill it, and then that somebody move to refer it to the Committee on Medical Economics.

The motion was voted upon.

THE SPEAKER: Apparently there is a division. I shall call for a rising vote.

Those in favor of the motion will please rise. (Seventeen) Those opposed will please rise. (Forty-nine) The motion is lost by a vote of seventeen to forty-nine.

Is there any further report from the Reference Committee on Standing Committees?

DR. FOSTER: There are no more reports from the Reference Committee on Standing Committees.

THE SPEAKER: Thank you.

We shall now proceed with the reports of Special Committees, by the Reference Committee on Special Committees.

XII (4). REFERENCE COMMITTEE ON REPORTS OF SPECIAL COMMITTEES

PUBLIC RELATIONS COMMITTEE [X (1)]

DR. ROY HOLMES: The Sub-Committee fully approved of the report of the Public Relations Committee, and with the usual complimentary remarks moves the acceptance and adoption of its report. I so move.

DR. CHRISTIAN: I second the motion.

The motion was voted upon and carried.

ADVISORY COMMITTEE ON POST-GRADUATE EDUCATION [X (10)]

DR. HOLMES: The Sub-Committee on the report of the Advisory Committee on Postgraduate Education feels inadequate to express its thanks to this Committee and, to make it short, advises the adoption and acceptance of the report, and I so move.

DR. A. P. BIDDLE (Wayne): I second the motion.

The motion was voted upon and carried.

MATERNAL HEALTH COMMITTEE [X (2)]

THE SPEAKER: Dr. Sladek, of Traverse City, will give the Sub-Committee's report on the Maternal Health Committee.

DR. E. F. SLADEK read the report of his sub-committee:

After a close study of the Report of the Committee on Maternal Welfare and also the minutes of its numerous meetings during this past year, the maternal welfare sub-committee on the Reports of Special Committees wishes to submit the following comments:

Fully realizing that this Report is incomplete, that

a new and revolutionary study of obstetrics practice as it is actually being conducted in this state at the present time is about to be undertaken, we await with great interest early reports of the progress in this study.

We especially wish to commend the committee membership for their zeal and self sacrifice of time and money which they already have given and will further have to give to this study and to the conduct of their educational program for both the laity and the medical profession.

We heartily endorse an educational program in obstetrics along the lines of the weekly post-graduate clinics as conducted for the physicians of the state during the past two years.

We feel that any program dealing with the education of the laity along the lines of lectures or movies, as to what constitutes efficient obstetrical care, should be under the direct sponsorship of local committees of each component county medical society and not left to any lay group.

DR. HOLMES: Mr. Chairman, I move that the report of the Committee on Maternal Health be received by the House of Delegates.

THE SPEAKER: Be received? You wish that, with no action taken on it?

DR. HOLMES: Be received.

DR. GREENE: I second the motion.

The motion was voted upon and carried.

RADIO COMMITTEE [X (3)]

ADVISORY COMMITTEE ON WOMAN'S AUXILIARY [X (4)]

IODIZED SALT COMMITTEE [X (9)]

MENTAL HYGIENE COMMITTEE [X (12)]

DR. HOLMES: Dr. Sundwall will report on four committee reports, the Mental Hygiene, Radio, Advisory Committee on Woman's Auxiliary and Iodized Salt Committee.

DR. JOHN SUNDWALL (Washtenaw): Mr. Speaker, the sub-committee of the Reference Committee on Reports of Special Committees not only approves but commends the splendid reports of the Mental Hygiene Committee, which you will find on page 57 of the handbook; the Radio Committee, on page 79 of the handbook; the Woman's Auxiliary, which you will find on page 78 of the handbook; and also the progress report of the Iodized Salt Committee as presented by Dr. F. B. Miner at the second session yesterday.

With a view of saving time the Reference Sub-committee recommends that the recommendations on the four reports be acted on in one item. It therefore recommends that the reports of these four committees be adopted by the House of Delegates. I so move, sir.

DR. JOHN WESSINGER (Washtenaw): I second the motion.

The motion was voted upon and carried.

DR. HOLMES: Dr. Dutchess, of Wayne, will report on the Liaison Committee for Hospital, Bar, Dentists' and Pharmacists' Associations.

LIAISON COMMITTEE WITH HOSPITAL ASSOCIATION [X (5)]

DR. CHARLES E. DUTCHESS (Wayne): Mr. Speaker and Members of the House: We make the following recommendations: That the report of the Committee on Hospital Association be accepted and adopted, and I move that the House of Delegates proceed to carry out that committee's recommendations.

DR. W. J. STAPLETON (Wayne): I second the motion.

The motion was voted upon and carried.

REPORT OF SEVENTY-FIRST ANNUAL MEETING

LIAISON COMMITTEE WITH STATE BAR [X (6)]

DR. DUTCHESS: You may note the report of Dr. Jennings' Committee on Liaison with the State Bar of Michigan. It is on page 77. In addition to that report as published in the handbook, Dr. Jennings offered a supplementary report of two paragraphs, which I should like to read:

"Your Committee has discussed further the question of medical testimony and feels that the subject is of too great importance to be reported upon without further and most exhaustive study.

"Your Committee feels that the Liaison Committee has already established cordial relations with the Bar, and that it can serve a useful purpose for the discussion of matters of common interest to the two professions."

We recommend acceptance and adoption of that committee's report, with this exception. In the last paragraph that report states, "It was decided that this should not be held during the coming year," referring to a joint meeting of the Michigan State Medical Society and the State Bar, "but that efforts should be made to hold such a meeting in the following year, probably at the annual meeting of either one of the Societies."

We doubt the feasibility of that suggestion, and I move that the report be accepted with the exception of the recommendation which I have just read.

DR. WESSINGER: I second the motion.

DR. JENNINGS: Mr. Chairman, this is a serious thing at the present time, and I don't think you should fool with it again. The great question which has got the medical profession into disrepute in this state in the various courts is the question of legal testimony. You have to do something in your local societies—either appoint a Censorship Committee or go into the desuetude in which you are at the present time and reap the harvest of what you sow. Medical testimony is a disgusting disgrace in the vast majority of instances and it should be checked. It is going to be checked, because in the first place the legal men have taken the attitude here in Wayne County, or the Commissioners of the Industrial Division have had to go to the Medical Society and get a number of names in order to get decent and unbiased testimony. That is a serious thing and it reflects upon your Society. Why keep passing the buck along? Let's get something done.

The motion was voted upon and carried.

LIAISON COMMITTEE WITH DENTISTS, NURSES, PHARMACISTS [X (7)]

DR. HOLMES: The Committee on Dentists, Nurses and Pharmacists has made no report.

CONTACT COMMITTEE TO GOVERNMENTAL AGENCIES [X (13)]

The Sub-Committee of the Reference Committee referring to the report of the Special Contact Committee with Governmental Agencies, because of the action taken on this floor on the Economics Committee report, wishes to offer its thanks to this Committee, and moves that it be received.

DR. SUNDWALL: I second the motion.

The motion was voted upon and carried.

DR. HOLMES: Mr. Speaker, I move that the report of the Reference Committee on Special Committees be adopted as a whole.

DR. WESSINGER: I second the motion.

The motion was voted upon and carried.

XII (5). REFERENCE COMMITTEE ON AMENDMENTS TO CONSTITUTION AND BY-LAWS

THE SPEAKER: The next report is the report of the Reference Committee on Amendments to the Constitution and By-Laws.

DR. W. R. TORGERSON: The Committee met yesterday afternoon to consider the amendments that had been proposed, and wishes to submit the following report:

COUNTY SOCIETY COMMITTEE ON LEGISLATION AND PUBLIC RELATIONS [VIII (1)]

The first amendment has to do with Chapter 9, Section 10, of the By-Laws, and if you are interested you can find it on pages 112 to 114 of the handbook, under "County Societies." The section to be changed is on the last page, and the amendment is to the effect that in the second line the word "policy" be deleted, and in its place the word "relations" be inserted, so that the section would read, "Each County Society shall appoint or elect a Committee on Legislation and Public Relations, and the County Secretary shall send the name and address of the Chairman to the Secretary of this Society."

The Committee felt that this was proper, and we move the adoption of this amendment.

DR. GREENE: I second the motion.

The motion was voted upon and carried.

CREATION OF STANDING COMMITTEE ON POSTGRADUATE EDUCATION [VIII (2)]

DR. TORGERSON: The second amendment is in regard to Chapter 6, Section 1, which you find on page 109, under "Standing Committees." The motion is to amend the By-Laws of the Michigan State Medical Society by adding to Chapter 6, Section 1 (F), a subdivision forming a Committee on Postgraduate Medical Education, and adding a new Section 8 to Chapter 6 as follows, which defines the duties of the Committee:

"The Committee on Postgraduate Medical Education shall consist of eleven members appointed by the President with the consent of the Council.

"The duty of this Committee shall be to supervise for the Michigan State Medical Society all present postgraduate medical training in the state and, with the approval of the Executive Committee of the Council, make any changes, additions or discontinuances of present programs and initiate such new programs as they deem advisable."

The Committee felt that this should be a rotating Committee, and added "three members to be appointed for one year, four members for two years, and four members for three years" to the first paragraph.

The Committee moves the adoption of this amendment.

DR. WENGER: I second the motion.

The motion was voted upon and carried.

SECRETARY AND EXECUTIVE SECRETARY [VIII (4)]

DR. TORGERSON: The next proposed amendment is an amendment to Chapter IV, Section 4, of the By-Laws, which is found on page 104-105 of the handbook. The proposed amendment substitutes a completely new Section 4, and reads as follows:

"The Secretary shall be an active member of the Michigan State Medical Society at a salary of \$2,400 per annum, and shall be a member of the Executive Committee of The Council. He shall be the recording officer of the House of Delegates, The Council, Scientific Assembly, and General Meeting. He shall also discharge the following duties:

"1. Collect all annual membership dues and such other moneys as may be due to the Society; keep membership records and issue membership certificates.

"2. He shall make all required reports to the American Medical Association.

"3. He shall deposit all funds received in an approved depository and disburse them upon order of the Council. The Council shall cause an annual audit of his accounts by a certified public accountant. He shall render a report to The Council reviewing the Society's activities and imparting recommendations for the advancement of the Society's interests at each meeting of The Council.

"4. Under the direction of The Council and with the advice of the Editor, he shall be the Business Manager of THE JOURNAL.

"5. He shall superintend all arrangements for the holding of all meetings in compliance with the Constitution and By-Laws and the instructions of The Council.

"6. He shall send out all official notices of meetings, committee appointments, certificates of election to office and special duties of committees.

"7. He shall receive and transmit to the House of Dele-

REPORT OF SEVENTY-FIRST ANNUAL MEETING

gates and to The Council all committee and officers' annual reports.

"8. He shall institute and correlate all new activities under the supervision of The Council, and shall work on county society integration and furnish information to the public concerning health matters as directed by the President and The Council.

"The Executive Secretary, not necessarily a physician or a member of the Michigan State Medical Society, shall be appointed by The Council annually and shall be remunerated by a salary which shall be fixed by the Council within limits approved by the House of Delegates.

"The Secretary shall, with the approval of The Council, assign to the Executive Secretary such of the above duties as he deems advisable."

The Committee thought that it might be wise not to put in the amount of the salary of the Secretary. Contingencies might arise where the Secretary could hardly afford to work for the amount that was put in here, but we thought that we would leave that for discussion at this meeting, and I move the amendment be adopted as written.

DR. JOHN L. CHESTER (Wayne): I second the motion.

DR. COOK: It says that the Secretary shall be a member of the Executive Committee and have a salary of \$2,400. I wonder if you mean that he would be an ex-officio member without vote, or do you mean that he is given the full power of voting? I think there is a very bad precedent in having a member of the Executive Committee with power to vote receiving a salary. He votes upon certain things; I wouldn't say he would vote upon his own salary, because his salary is fixed by The Council, but I think it is a bad precedent to have a member with a vote in the Executive Committee who is on a salary. I think we should consider that. It is only a personal opinion.

I think also that the words "report" and "recommendations" should be clarified for the benefit of the House.

DR. TORGERSON: At the present time I don't believe the Secretary has a vote. He is an ex-officio member.

DR. COOK: But your resolution is changing the setup, and the interpretation should not be in question.

DR. TORGERSON: There is a proposed amendment to the Constitution that corrects that situation.

DR. COOK: Should it not say it in here, so that there will not be any argument?

DR. TORGERSON: Can you say it in here before the amendment to the Constitution is made, which will not go into effect until next year?

DR. GRUBER: May amendments be made to this report at the present time? May an amendment be submitted now to insert the words "ex-officio, without a vote" or does that have to lie over until next year?

THE SPEAKER: If you consider that as under the head of "New Business" it can not be done.

DR. GRUBER: Is that "New Business" or is it straightening up what we want to do here?

THE SPEAKER: If it were not done it would have to be held over for another year. In the opinion of the Chair, I think that by a vote of the assembly there is no reason it can not be done. If the Chair is wrong he will stand corrected.

DR. GRUBER: Mr. Speaker, I would like to make a motion that the words "ex-officio without a vote" be added in the appropriate place to the amendment.

DR. GREENE: I second the motion.

The motion was voted upon and carried.

DR. T. F. HEAVENRICH (Port Huron): There is a question there in regard to the salary of the Executive Secretary. In the event that the present Executive Secretary or any Executive Secretary goes out of his position during the year, as I under-

stand it your resolution states that the salary shall be named by the Council and must be approved by the House of Delegates. Wouldn't that necessitate a special meeting of the House of Delegates before you could hire a new Executive Secretary, to determine what his salary would be?

DR. HOLMES: I think Dr. Heavenrich read the original draft and hasn't seen it since it was corrected and turned in. It says "within limits prescribed by the House of Delegates."

That seems to take care of that.

The motion was voted upon and carried.

DR. SPRINGER: The limits of that salary haven't been set by the House of Delegates, have they?

DR. TORGERSON: They are determined by the Council, approved by the House of Delegates.

DR. SPRINGER: Someone just read that it was to be set by the House of Delegates.

THE SPEAKER: My understanding was that it was set by the Council and approved by the House of Delegates.

DR. TORGERSON: "Remunerated by a salary fixed by the Council, within limits approved by the House of Delegates."

DR. GRUBER: A point of information. What are the limits approved by the House of Delegates?

THE SPEAKER: Will the Chairman of the Council respond to the question of Dr. Gruber, of Wayne?

DR. COOK: Limits of salary? Why, there has not yet been any limit established. That would be the future duty of this House to establish, as I see it. That would be a part of your duties, to complete your work. You have simply said "within limits established" but there has been no vote taken to establish them.

The present salary, according to my understanding, is \$6,000 a year. Mr. Burns was receiving \$5,000 at Wayne County and was due for a raise to \$5,500 within two months. I might say that it may be to your interest to know that by the activity of the two Secretaries this year the income from exhibitors alone will reach approximately a figure of \$5,000, which is far in excess of any amount that was ever raised before, and in my opinion it has made it so that medical meetings of this assembly, if we are going to carry on such meetings, must be held in centers which are capable of putting on such a program as this.

I don't think the limit which these exhibits may reach has been attained at all. In spite of the fact that that high figure was reached, there were some exhibitors who were turned down after the space was all rented. There are seventy-two technical exhibitors at this session. I believe that is a direct result of your change in working these things out.

I would like to say again that your Secretaries, and Mr. Burns especially, have worked night and day in the interest of this profession. Bill Burns has been the busiest this year he ever was. If he ever was any busier I don't know when it was.

DR. BIDDLE: I move that the salary of the Executive Secretary be fixed by the Council at a maximum of \$6,000.

DR. WESSINGER: I second the motion.

DR. GREENE: Is this in line? Isn't this new business?

THE SPEAKER: This is business pertaining to your Constitution and By-Laws, and if you don't act upon it now when can you act upon it? You would be in the dark for one more year.

DR. R. C. JAMIESON (Wayne): Could I make an amendment to that motion limiting the salary fixation to a maximum of \$6,000 for the ensuing year only?

DR. BIDDLE: I accept that amendment.

DR. HIRSCHMAN: I believe that the Michigan

REPORT OF SEVENTY-FIRST ANNUAL MEETING

State Medical Society is on the high road to greater and better things, and I believe one of the best moves that we ever made was at the Soo last year when we employed an Executive Secretary, and I am very glad to see that that is being put into the Constitution.

Now, Mr. Speaker, it is the poorest sort of business in the world for the Michigan State Medical Society at this time, in the House of Delegates, to direct the Council or anybody else as to what salary they are to pay to any officer. The salaries of officers are more or less governed, as the salaries of your employees are, by their ability to do certain work, and as has been shown in this one year both of our Secretaries have done a fine job, and the money that has been spent has been well worth while.

I believe we are making a serious mistake in directing the Council as to either a minimum or a maximum salary. We have elected a Council as our Board of Directors. They have carried on the affairs of this Society in a way which reflects credit upon them. Our financial condition is much better than that of many state societies, in spite of the depression, and I, for one, would like to vote my protest against any action to designate either a minimum or a maximum salary for any officer. If we can't trust our Council to pay men the right sort of salaries we don't need a Council.

DR. BIDDLE: I believe we have to fix a salary. We are called upon to fix it.

THE SPEAKER: I believe that that is in the By-Laws.

DR. GRUBER: I move a reconsideration of the motion by which we adopted this report. May I explain my reason: I should like to have this reconsidered and the portion of the amendment to By-Laws which says that the House of Delegates shall fix the salary should be deleted. The Council should be allowed to fix the salary. That is my reason for moving for a reconsideration, and if it is reconsidered I would like to move an amendment to the motion.

DR. BIDDLE: I will withdraw my motion.

DR. WESSINGER: I withdraw my second.

DR. GRUBER: I move a reconsideration of the original motion.

DR. JAMIESON: I second the motion.

The motion was voted upon and carried.

DR. GRUBER: May I ask to have that portion of the By-Laws read?

DR. TORGERSO: "The Executive Secretary, not necessarily a physician or a member of the Michigan State Medical Society, shall be appointed by the Council annually and shall be remunerated by a salary which shall be fixed by the Council, within limits approved by the House of Delegates."

DR. GRUBER: Mr. Chairman, I move the deletion of the words "within limits approved by the House of Delegates."

DR. SPRINGER: I second the motion.

The motion was voted upon and carried.

DR. GRUBER: Mr. Speaker, I move the adoption of the By-Laws as amended.

DR. GREENE: I second the motion.

The motion was voted upon and carried.

CREATION OF STANDING COMMITTEE ON PUBLIC RELATIONS [XI (10)]

DR. TORGERSO: The next amendment that was proposed was to Chapter 6 of the By-Laws, page 109, and reads as follows:

"WHEREAS, In the past the Medical Profession has been negligent in studying the relations between the profession and the public, and

"WHEREAS, In the past year the Special Committee known as the Public Relations Committee has served most effectively; be it

"RESOLVED, That Chapter 6, Section 1, of the By-Laws of the Michigan State Medical Society be amended by adding a further sub-section, 'Public Relations Committee.' Be it further

"RESOLVED, That Section 6 be amended by adding a further Section which shall read as follows:

"The Committee on Public Relations shall consist of nine members appointed by the President with the advice of the Council. It shall be the duty of this Committee: (a) to integrate and publicize all approved plans and projects emanating from the Council, the Executive Committee, and other Standing and Special Committees of the Michigan State Medical Society; (b) to consider all plans and projects, and make suggestions and recommendations to improving or changing such plans for integration and publicizing; (c) to develop further plans for better physician-public contacts."

The Committee approved the amendment, and I move its adoption.

DR. GREENE: I second the motion.

The motion was voted upon and carried.

CREATION OF STANDING COMMITTEE ON ETHICS [XI (6)]

DR. TORGERSO: Another amendment to Chapter 5, Section 3, of the By-Laws, under "Council" on page 106:

"WHEREAS, It is apparent that many malpractice suits can be avoided if a higher code of ethics were obtained among the medical profession; and

"WHEREAS, Under Chapter 5, Section 3, of the By-Laws of the Michigan State Medical Society the Council serves as the Board of Censors of the Society; and

"WHEREAS, Because of the many duties and the infrequent meetings of the Council it has been unable to devote any considerable amount of time to this phase of their work; be it

"RESOLVED, That Chapter 6, Section 1, be amended by adding a further sub-section, 'Committee on Ethics.' Be it further

"RESOLVED, That Chapter 6 be amended by adding a further Section which shall read as follows:

"The Committee on Ethics shall consist of five members appointed by the President with the advice of the Council. It shall be the duty of this Committee to advise the Council concerning questions of ethics. It shall investigate all questions of an ethical nature upon the request of individual Councilors or component county societies. It shall report the results of such investigations to the Council for their final approval. It shall attempt to integrate the work of this Committee with the Medico-Legal Committee of the State Society. It shall assist county societies in setting up schemes of integration between their Ethics and Medico-Legal Committees."

I may have confused some of you. That was an amendment to Chapter 6, "Standing Committees," making this Committee on Ethics a Standing Committee. The Committee moves the adoption of this amendment.

DR. JAMIESON: I second the motion.

The motion was voted upon and carried.

PROPOSING SPEAKER OF HOUSE AS A MEMBER OF THE COUNCIL [VIII (3)]

DR. TORGERSO: There was also read yesterday a proposed amendment to the Constitution, page 96 of your handbook, under Article 5, The Council. The proposal as read was as follows:

"I move the Constitution be amended to insert in line 8, following the word 'Secretary,' 'the Speaker of the House of Delegates.' The sentence would then read, 'It should consist of the Councilors, the President, the President-Elect, the Secretary, the Speaker of the House of Delegates, and the Treasurer of the Society.'"

"An additional line should be added to the section reading, 'The Speaker of the House of Delegates shall be a member of the Council and of its Executive Committee with the power to vote.'"

That must hold over a year before it can be voted on, so there are no recommendations in connection with this proposed amendment.

That is all of the report.

REPORT OF SEVENTY-FIRST ANNUAL MEETING

XII (6). REFERENCE COMMITTEE ON RESOLUTIONS

THE SPEAKER: The next item of business is that of the Reference Committee on Resolutions. The Chair recognizes Dr. Christian, of Ingham.

EMERITUS MEMBERS [XI (1)]

DR. CHRISTIAN: The first resolution is that group of resolutions recommending the election of physicians throughout the state to emeritus membership. The resolution from Wayne included Dr. Thuner, Dr. Angus McLean, and Dr. A. N. Collins. Your Committee believes that those men, who have rendered long and valuable service to this profession, should be recognized by making them emeritus members; also Dr. Hargrave, of Palo, Ionia County, who has been a member for many years there; Dr. Braden, of Scotts; Dr. J. W. Hawkey, of Bloomingdale; and Drs. Leininger and Boulton, of Gladwin. All of these men have fulfilled the requirements as set up in the Constitution and By-Laws, and we recommend that they be elected to emeritus membership and notified through our Secretary.

I move the adoption of this report.

DR. HOLMES: I second the motion.

The motion was voted upon and carried.

COMMITTEE ACTIVITIES [XI (4)]

DR. CHRISTIAN: The next resolution concerns the integration of all Society activities through the Executive Office at Lansing. We feel that that is the will of the House of Delegates and the Council and that all committees who are working in the Michigan State Medical Society should carry on their official business through our Executive Office, through the Secretary or Executive Secretary, and that all committees should be covered by one of these men whenever possible.

I move the acceptance and adoption of that resolution.

DR. CASSIDY: I second the motion.

The motion was voted upon and carried.

LECTURES BY PHYSICIANS ON SOCIAL HYGIENE [XI (8)]

DR. CHRISTIAN: The next resolution concerns the teaching of sex hygiene to high school students, as has been done in Ingham County, through physicians, with physicians only as teachers. Your Committee believes that in Ingham County a good piece of work has been done and we would like to recommend that this be made a uniform program and referred to the Public Relations Committee for its action in those counties which are in need of this type of work.

Mr. Speaker, I move the acceptance and adoption of this resolution.

DR. BRASIE: I second the motion.

The motion was voted upon and carried.

STANDARD FOR INTERNE TRAINING [XI (7)]

DR. CHRISTIAN: The next resolution is from Dr. Philip A. Riley, of Jackson, concerning the hospital internships in certain hospitals. As Dr. Riley told you yesterday, a hospital of seventy-five beds can have three interns, and a hospital of seventy-four beds can have none. He has asked that this be referred to the delegates of the American Medical Association who will take this up in whatever manner they see fit with the Council on Medical Education and Hospitals.

Your Committee believes that this should be referred to the Delegates to the American Medical Association for appropriate action. Mr. Speaker, I move the acceptance and adoption of this resolution.

DR. WENGER: I second the motion.

The motion was voted upon and carried.

MEDICAL EXAMINER SYSTEM IN MICHIGAN [XI (3)]

DR. CHRISTIAN: The next resolution is the one on the Medical Examiner system to replace the present Coroner system, in Michigan. Your Committee feels that as a Medical Society we should merely function in recommending this as a civic organization, and should have nothing to do with any legislative activities in attempting to put it across. We recommend that this be accepted and that the Secretary make the proper disposition of it.

I move its acceptance and adoption.

DR. WENGER: I second the motion.

The motion was voted upon and carried.

CRIPPLED CHILDREN COMMISSION [XI (5)]

DR. CHRISTIAN: The next resolution was presented by Dr. Roy H. Holmes:

"WHEREAS, The Crippled Children's Commission, through its Executive Secretary, has arbitrarily dictated to physicians of this state in matters which ethically should be decided only by the doctor and his patient, and

"WHEREAS, there is a system of solicitation of patients by paid employees of the Crippled Children's Commission and its allied societies believed to be contrary to the ethics of the American Medical Association and its allied societies; therefore be it

"RESOLVED, That a committee be appointed from the House of Delegates to investigate the activities of this Commission and the members of the Michigan State Medical Society who are interested in these unethical procedures, this committee to report promptly to the Executive Council of the Michigan State Medical Society, with recommendations."

Your Committee believes that the Crippled Children's Commission is cooperating. We have assurance from the Council and the committees that have had contact. Therefore, we disapprove of this resolution as written, but we recommend that a sub-committee of the Special Contact Committee with Governmental Agencies confer with the Crippled Children's Commission in an attempt to clarify what type of orthopedic surgery occurring in indigent children can be properly cared for by the general surgeon, and that this committee report to the Executive Committee of the Council.

I move, Mr. Chairman, that this resolution be disapproved.

DR. GREENE: I second the motion.

DR. CASSIDY: Why do you want to disapprove this thing? We have had this question come up for so many years on the regimentation of crippled children, tending from the wide field of general surgery into the narrow field of orthopedic surgery, and the fee rate in the crippled child is entirely different from the fee rate in the afflicted child. This thing ought to be settled in some way. There should be some recommendation going from this body to some of the rulings of the Crippled Children's Commission.

DR. CHRISTIAN: I think we have not been clear. I think it is the intent of my Committee to move the acceptance and adoption of this resolution as amended by our Committee.

We disapprove of this resolution as written, but we recommend that a sub-committee of the Special Contact Committee with Governmental Agencies be appointed to confer with the Crippled Children's Commission in an attempt to clarify what type of orthopedic surgery occurring in indigent children can be properly cared for by the general surgeon.

The motion was voted upon and carried.

DR. CHRISTIAN: Mr. Speaker, I move the acceptance and adoption of the report as a whole.

DR. GREENE: I second the motion.

The motion was voted upon and carried.

DR. E. A. MEYERDING
SAINT PAUL, MINNESOTA

THE SPEAKER: We are very fortunate this morning in having with us one who has come to visit us,

REPORT OF SEVENTY-FIRST ANNUAL MEETING

the Secretary of the Minnesota State Medical Association, Dr. E. A. Meyerding.

Those in attendance arose and applauded.

THE SPEAKER: Dr. Meyerding, we thank you for visiting us and we hope you will come to Michigan again.

THE SPEAKER: The Chair at this time will recognize Dr. Greene, of Shiawassee.

RESOLUTION ON DEATH OF DR. CARL F. MOLL (XIV)

Dr. Greene read the following resolution:

WHEREAS, The Michigan State Medical Society has suffered an irreparable loss in the untimely death of Carl F. Moll, and

WHEREAS, For many years Dr. Moll gave freely of his time and energy as a county officer, as delegate to the State Society, as State President, and delegate to the American Medical Association, and

WHEREAS, We shall miss not only his wisdom and experience, but also his kindly personality and his rare ability for making friends,

BE IT RESOLVED, that the Michigan State Medical Society express its sorrow and loss in the death of Carl F. Moll, and

BE IT FURTHER RESOLVED that this resolution be made part of the records of the Michigan State Medical Society, and that a copy be sent to the Genesee County Medical Society and to the family of Dr. Moll.

DR. GREENE (continuing): I move the adoption of this resolution.

DR. CASSIDY: I second the motion.

The motion was voted upon and carried.

THE SPEAKER: The Chair will at this time also recognize Dr. Robb, of Wayne.

RESOLUTIONS RE: COOPERATION FROM GOVERNMENTAL AGENCIES [XI (9)]

DR. CURRY: Mr. Speaker, I have been asked to present this in behalf of Dr. Robb.

Your Committee appointed to draft Resolutions to be dispatched to administrative officers of the State of Michigan respectfully submits the following proposed letter:

"Hon. Frank D. Fitzgerald, Governor,
Hon John J. O'Hara, Auditor General,
Hon. Theodore I. Fry, Treasurer,
Hon. Orville E. Atwood, Secretary of State,
Hon. David Crowley, Attorney General,
The Michigan Crippled Children Commission.

The House of Delegates of the Michigan State Medical Society, in executive session at its Annual Meeting in Detroit, September 22, 1936, adopted the following Resolutions:

Resolved, That the sincere thanks and appreciation of the medical profession of the State of Michigan be extended to each of the above for his fine understanding and whole-hearted coöperation during the past year in efforts to solve social-medical problems."

J. M. ROBB, M.D., Chairman

L. G. CHRISTIAN, M.D.

GEO. J. CURRY, M.D.

DR. CURRY (continuing): I move the adoption of the resolution.

DR. SPRINGER: I second the motion.

The motion was voted upon and carried.

THE SPEAKER: The Chair will entertain a motion to revert to the regular order of business.

DR. GREENE: I so move.

DR. CURRY: I second the motion.

The motion was voted upon and carried.

XVII. ELECTION OF OFFICERS

THE SPEAKER: Members of the House, we are now about to take up the election of officers of this Society. Therefore, before proceeding, I would like the assembly to move forward where the tellers can reach them.

In the case of nominating speeches I shall limit you to two minutes. I shall ask Dr. Snapp, of Kent; Dr. Catherwood, of Wayne, and Dr. Brasie, of Genesee, to act as tellers.

XVII (1). COUNCILOR FOR THE FIRST DISTRICT

The first election is that of Councilors, which we shall take up one at a time. The first is the First District, Wayne, a Councilor to succeed Dr. Henry R. Carstens.

DR. L. T. HENDERSON (Wayne): The delegates of Wayne County want to propose the name of Dr. Henry R. Carstens to succeed himself as Councilor for the First District. The Wayne delegates feel that Dr. Carstens has completed an excellent job as Councilor and should be returned. It gives me great pleasure to nominate Dr. Carstens as Councilor of the First District.

DR. BIDDLE: I second the nomination.

THE SPEAKER: You have heard the nomination of Henry R. Carstens, supported by Dr. Biddle. Are there any other nominations?

DR. GRUBER: I move that the nominations be closed.

DR. P. L. LEDWIDGE: I move that we suspend the rules of this House and instruct our Secretary to cast the vote for Dr. Carstens.

DR. GRUBER: I second the motion.

The motion was voted upon and unanimously carried.

THE SECRETARY: Mr. Speaker, the Secretary does so cast.

THE SPEAKER: I therefore declare Henry R. Carstens elected Councilor for the First District of Wayne.

XVII (2). COUNCILOR FOR THE FOURTH DISTRICT

The next election of a Councilor is that of the Fourth District, to succeed Dr. C. E. Boys, of Kalamazoo.

DR. D. RICHMOND (Berrien): Mr. Speaker, Fellow Delegates: I wish to nominate a man from my county of Berrien as Councilor for the Fourth District. In the past, all Councilors have come from Kalamazoo. While Kalamazoo may be one of the most progressive and beautiful cities in the state, we of the other counties in that District do not believe it is the fount of all knowledge and that only Kalamazoo men are wise enough or smart enough to be Councilors.

We have a man interested in the State Medical Society and capable of carrying on its work. The man whom I wish to nominate has been a delegate from Berrien County for ten years. He was Secretary of our County Society for over ten years, and incidentally the best we have ever had. He is vitally interested in the State Society and all its doings, and I for one am certain he would be a careful and conscientious Councilor. I wish to nominate Dr. William Ellet, of Benton Harbor, as Councilor of the Fourth District.

DR. MCCUTCHEON: I desire to second the nomination of Dr. Ellet. I, too, feel that a Councilor from the western part of the state would be welcome, and we heartily endorse Dr. Ellet as Councilor of the Fourth District.

DR. CHARLES TENHOUTEN (Kalamazoo): I wish to nominate as Councilor for the Fourth District, Dr. F. T. Andrews, of Kalamazoo. Dr. Andrews has practiced medicine in Kalamazoo for thirteen years; he has been a member of the House of Delegates for nine years, he has served on numerous committees. During the past year he was a member of our Public Relations Committee. I think that we should judge our Councilors not by geography but by their qualifications, and it gives me pleasure to tell you that the men of Kalamazoo and Van Buren and Allegan Counties wish to endorse Dr. F. T. Andrews.

THE SPEAKER: Dr. Andrews of Kalamazoo has been nominated.

REPORT OF SEVENTY-FIRST ANNUAL MEETING

DR. A. T. HAFFORD (Calhoun): I second the nomination.

THE SPEAKER: Are there any other nominations for Councilor of the Fourth District?

DR. SPRINGER: I move that the nominations be closed.

DR. CASSIDY: I second the motion.

THE SPEAKER: The tellers will please distribute the ballots.

While the tellers are distributing these ballots, the Speaker recognizes Dr. Sheets, a member of the Credentials Committee. It has been brought to the attention of the Speaker that perhaps you, as Chairman of that Committee, would desire to say a word of kindness to your fellow workers throughout your Credentials career.

DR. SHEETS: Mr. Speaker on behalf of myself as Chairman, and Dr. Barrett and Dr. Keyport, the other members of this Committee, we wish to express our thanks to Mrs. L. Fernald Foster and Mrs. I. W. Greene for the valiant service that they rendered in aiding us to organize the House of Delegates yesterday morning. We would like to have this in the record. We appreciate it very much, and with the terrible tussle we had with some of the counties of the state in straightening out their credentials, we probably would still have been toiling had it not been for their services.

THE SPEAKER: Thank you, Dr. Sheets. I don't believe that requires any action. I believe every member of the House of Delegates is thoroughly in accord. These ladies' husbands, respectively, I trust will be good enough to take this message back to their wives.

What is the result of the ballot, Mr. Secretary?

THE SECRETARY: Mr. Speaker, of seventy-three votes cast, fifty-seven are for Dr. Andrews and sixteen for Dr. Ellet.

THE SPEAKER: I therefore declare Dr. Andrews elected Councilor of the Fourth District to succeed Dr. C. E. Boys.

DR. LUCE: I would like a report from the Credentials Committee as to the total number of delegates in this room.

THE SPEAKER: There seems to be some doubt as to the number of properly seated delegates, I take it.

DR. LUCE: It is just a matter of custom.

THE SPEAKER: Just as a matter of record.

THE SECRETARY: If I may be permitted to speak for the Credentials Committee, I hold in my hands an augmented roll of eighty-two members, duly accredited delegates.

THE SPEAKER: Is the gentleman from Wayne satisfied?

DR. LUCE: I wanted to know just how many votes Wayne might put in. We want to be within the limit.

XVII (3). COUNCILOR FOR FIFTH DISTRICT

THE SPEAKER: The next order of business is the election of Councilor of the Fifth District to succeed Dr. Vernor M. Moore, of Grand Rapids.

DR. BROOK: On behalf of the Kent delegation I desire to place in nomination, Dr. Vernor M. Moore, to succeed himself. He has the whole-hearted and unanimous support of the Kent delegation.

DR. E. A. STICKLEY (Ottawa): I take great pleasure in seconding the nomination of Dr. Moore as Councilor of the Fifth District.

DR. BROOK: Since Dr. Stickley, of Ottawa County, has supported the nomination, and Kent and Ottawa comprise the District, and there being no further nominations, may I move that the rules be suspended and that the Secretary be instructed to cast the ballot of the House for Dr. Moore?

DR. WENGER: I second the motion.

The motion was voted upon and carried.

THE SECRETARY: Mr. Speaker, your Secretary casts the unanimous ballot for Dr. Moore as Councilor for the Fifth District.

THE SPEAKER: I therefore declare Vernor M. Moore elected Councilor of the Fifth District.

XVII (4). COUNCILOR FOR SIXTH DISTRICT

The next order of election is that of Councilor for the Sixth District, to succeed Dr. Henry Cook.

DR. HART: I wish to nominate a man who has long been a member of the House of Delegates and who has been very active in the State Medical Society's business for years, Dr. I. W. Greene.

DR. BRASIE: I second the nomination.

THE SPEAKER: Are there any other nominations? (None.)

DR. BRASIE: Inasmuch as the delegates from these counties are agreed, and there are no more nominations, I move that the rules be suspended and the Secretary instructed to cast the unanimous ballot of the Society for Dr. Greene.

DR. CURRY: I second the motion.

The motion was voted upon and carried.

THE SECRETARY: Mr. Speaker, your Secretary does so cast.

THE SPEAKER: I therefore declare Dr. I. W. Greene, of Shiawassee, elected Councilor of the Sixth District.

XVII (5). COUNCILOR FOR ELEVENTH DISTRICT

I believe we have one more—I am so informed—which is not on your program, because of a very recent resignation, and I presume it is in order to elect a successor under those conditions. I want to call your attention, then, to the resignation of Dr. T. P. Treynor, of the Eleventh District.

DR. O. D. STRYKER (Newaygo): It becomes my pleasure to offer in nomination today as our candidate a man who has worked long in the interests of organized medicine in the State of Michigan, who has served on many important key committees of the State Medical Society, who has been editor of the *County Bulletin*, and who has done much to advance the cause of organized medicine in the State of Michigan. Therefore, I am happy to present the name of Dr. Roy Herbert Holmes, of Muskegon, as Councilor for the Eleventh District.

DR. W. LEMKE (Oceana): I second the nomination of Dr. Holmes.

DR. HARTWELL: It is a pleasure to express the opinion of the brothers in medicine of Dr. Holmes, of Muskegon, and to further second this nomination, and also to move that the nominations be closed.

DR. BIDDLE: I second the motion.

The motion was voted upon and carried.

DR. HIRSCHMAN: I move you, then, that the Secretary cast the unanimous ballot for Dr. Roy H. Holmes.

DR. LEMKE: I second the motion.

The motion was voted upon and carried.

THE SECRETARY: Mr. Speaker, your Secretary does so cast.

THE SPEAKER: I therefore declare Dr. Roy H. Holmes elected Councilor of the Eleventh District.

I believe that concludes that part of our elections.

XVII (6). DELEGATES TO A. M. A.

The next order of business is the election of delegates to the American Medical Association; first, to succeed Dr. H. A. Luce, of Detroit.

DR. GEIB: I wish to present the name of Dr. H. A. Luce, of Wayne, as delegate to succeed himself.

DR. WESSINGER: Before that is seconded I would like, if in order, to make a motion that we suspend the rules of this House and elect the entire delega-

REPORT OF SEVENTY-FIRST ANNUAL MEETING

tion and alternates to the American Medical Association for another year, by viva voce vote. They have rendered us yeoman service and they are entitled to this compliment. Therefore, I make this motion, and I trust that it will be supported.

DR. SPRINGER: I second the motion.

DR. HIRSCHMAN: While I have no objection to this latter motion, if Dr. Geib should withdraw his nomination, well and good, otherwise we will have to act on his nomination first.

THE SPEAKER: Yes, I think you are quite right. We started out individually.

DR. HENDERSON: I support the nomination of Dr. Luce.

DR. LEMKE: I move that the nominations be closed.

DR. STRYKER: I second the motion.

The motion was voted upon and carried.

DR. WESSINGER: I now repeat my motion.

DR. HIRSCHMAN: A point of order. I am not opposing it at all. The motion should have included the direction of the Secretary to cast the ballot for Dr. Luce. That has not been done, so he has not been elected yet. I move, sir, that the Secretary be instructed to cast the ballot for Dr. Luce.

DR. WESSINGER: I second the motion.

The motion was voted upon and carried.

THE SECRETARY: Mr. Speaker, your Secretary does so cast.

THE SPEAKER: I therefore declare Dr. H. A. Luce elected as delegate to the American Medical Association.

DR. WESSINGER: I now make a motion, Mr. Speaker, that the remaining three delegates to the American Medical Association, and the alternates be reelected to succeed themselves for one year. I don't need to repeat that they have done yeoman service. We know that.

DR. BIDDLE: I second the motion.

DR. LUCE: Just as a matter of correcting the record, Dr. Wessinger said "for one year." Is not the term for two years?

THE SPEAKER: Yes.

DR. WESSINGER: I accept that correction.

DR. GREENE: It seems to me that this is a little out of line. We have expressed ourselves on one man. It seems to me we should have an opportunity to express ourselves on all of them individually. Maybe we have different opinions. There may be some delegates of whom we are in favor, and perhaps others of whom we are not.

The motion was voted upon.

THE SPEAKER: There apparently is a division of the House. The Speaker will ask for a rising vote. Those in favor of the motion will please rise and remain standing until counted (26). Those opposed, please rise (31).

By a vote of twenty-six to thirty-one the motion is lost. We will therefore proceed to the election of a delegate to the American Medical Association to succeed Dr. C. S. Gorsline.

DR. PHILIP RILEY: I would like to nominate Dr. L. G. Christian to go to the American Medical Association. There have been a number of reforms that have come through our own local House of Delegates that Dr. Christian has sponsored, and I would like to see him go to the A. M. A. Therefore, I should like to nominate Dr. Christian for that post.

DR. CHRISTIAN: I withdraw and will not allow my name to be presented.

DR. STRYKER: I second the nomination of Dr. Christian.

THE SPEAKER: Dr. Christian withdraws from the nomination.

DR. CHESTER: This is a very important office. In

normal times this calls for a man representative of the rank and file of the profession, one who could attend the majority of the meetings of the American Medical Association and who could attend the regular and special meetings, and who could represent the profession of this state with honor and dignity. As we were told this morning, we are living in abnormal times. We are living in an age when anything may happen, and our profession may well undergo a metamorphosis, either through legislative enactment or the force of economic circumstances. Therefore, the occasion calls for a man of exceptional attainment.

I believe we have such a person in Dr. Thomas K. Gruber. Dr. Gruber is, currently, president of the Wayne County Medical Society and his tenure of office is proving notable. For many years he has been active in the various functions of the Society, and such tasks as have been assigned to him have been distinguished by his able performance.

During the past three years, Dr. Gruber has attended all of the regular meetings, including the executive sessions, of the American Medical Association. He is, therefore, thoroughly familiar with the inner workings of the parent body. I have known Dr. Gruber for about twenty years, and during that time I have known that he can get things done, sometimes under the most trying circumstances, and general practitioners, men on the firing line, need not fear him with this more than ordinary assignment. He knows their needs and requirements and he is ever willing and ready to strenuously advocate their cause.

I, therefore, earnestly solicit your support, in order that we may elect this most worthy candidate to be our representative to the American Medical Association. Dr. Gruber will grace the position with honor and dignity.

THE SPEAKER: The name of Dr. T. K. Gruber has been placed in nomination.

DR. CHRISTIAN: I second the nomination.

DR. HAFFORD: I wish to nominate Dr. C. S. Gorsline to succeed himself in this office. Dr. Gorsline has had more experience than probably anyone else in this particular line of work. He has been active in the Society for years and years; he is competent, is known by all of you and is a hard worker. After all, Wayne County has plenty of representatives, and I think, perhaps, it would be just as well if we had one, at least, from out in the state, and I take pleasure in nominating Dr. Gorsline.

DR. DEAN MYERS (Washtenaw): The Washtenaw County delegation wishes to endorse the nomination of Dr. Gorsline. The delegation feels that this is not a proper time to make a change. Dr. Gorsline has served the Society for many years. He is in a position to render unusual service to this Society in the House of Delegates of the American Medical Association. We wish to place him in nomination, to support his nomination.

DR. A. L. CALLERY (St. Clair) I move that the nominations be closed.

DR. WENGER: I second the motion.

The motion was voted upon and carried.

THE SPEAKER: The tellers will please distribute the ballots. The names of Drs. T. K. Gruber and C. S. Gorsline have been placed before you.

MESSAGE FROM DR. B. R. CORBUS (XIII)

While the tellers are taking up the ballots I desire to read this telegram:

"With grateful appreciation I acknowledge your kindly telegram. I especially regret that I could not, for the first time as delegate, join you in your deliberations, the fifteenth year in which I would have had the opportunity in one office or another of showing my sincere interest in Michi-

REPORT OF SEVENTY-FIRST ANNUAL MEETING

gan Medicine. May your deliberations be successfully concluded that Michigan, under your direction, may, more than ever, point the way for all forward-looking medical societies."

BURTON R. CORBUS.

(Applause.)

THE SECRETARY: Mr. Speaker, there were sixty-seven votes cast, of which thirty-four were cast for Dr. Gruber and thirty-three for Dr. Gorsline.

I declare Dr. T. K. Gruber elected delegate to the American Medical Association.

The next order of business is the election of a delegate to the American Medical Association to succeed Dr. J. D. Brook of Grandville.

DR. SNAPP: I should like to nominate Dr. Brook to succeed himself as delegate to the American Medical Association. His faithfulness in the House of Delegates of the parent body over the years is a record, and his reports here are well known to all of us—the wonderful reports he gives. I should like to nominate him to succeed himself.

DR. STICKLEY: I second the nomination.

DR. CHESTER: I move that the rules be suspended and that the Secretary cast the ballot for Dr. Brook for delegate.

DR. WENGER: I second the motion.

The motion was voted upon and carried.

THE SECRETARY: The Secretary has cast the unanimous ballot of this body for Dr. Brook to succeed himself as delegate to the American Medical Association.

THE SPEAKER: I therefore declare Dr. J. D. Brook elected delegate to the American Medical Association to succeed himself.

The next is the election of a delegate to the American Medical Association to succeed Dr. C. R. Keyport, of Grayling.

DR. HART: I wish to nominate Dr. Keyport to succeed himself.

DR. ROBB: I move that the nominations be closed and that the Secretary cast the unanimous ballot of the House for Dr. Keyport.

DR. GREENE: I second the motion.

The motion was voted upon and carried.

THE SECRETARY: Your Secretary does so cast.

THE SPEAKER: I therefore declare Dr. C. R. Keyport, of Grayling, elected delegate to the American Medical Association to succeed himself.

XVII (7). ALTERNATE DELEGATES TO THE A. M. A.

We now go to the election of alternate delegates, the first to succeed Dr. T. E. DeGurse, of Marine City.

THE SECRETARY: (reading)

"The number of alternate delegates to the American Medical Association shall equal the number of delegates. Alternate delegates shall hold office for two years. At each annual election, candidates for alternate delegates at large shall be nominated in number equal to or greater than the number to be elected. Election of alternate delegates shall be by ballot. The required number of high candidates shall be declared elected.

"Alternate delegates at large so elected shall have relative seniority according to the respective numbers of votes received by them, and such seniority rank shall be designated at the time of election."

Then there is a provision regarding a tie vote, which we can take up if necessary.

THE SPEAKER: The Chair will entertain nominations for alternate delegate to succeed Dr. T. E. DeGurse.

DR. CALLERY: I have much pleasure in presenting the name of Dr. T. E. DeGurse, of Marine City, to succeed himself. Two years ago, when there was sickness in the family of the regular delegate, Dr. DeGurse stepped into the breach at the last minute, went to Atlantic City at his own ex-

pense, to find the delegate able to be in attendance, and therefore showed his willingness to serve this State Society. Dr. DeGurse has been in practice for forty-one years in St. Clair County. He is one of the strongest advocates of organized medicine in the State of Michigan. He will represent this Society as delegate with ability and with good faith. I therefore have much pleasure in presenting his name for alternate.

THE SPEAKER: Dr. T. E. DeGurse has been nominated.

DR. BIDDLE: Most of the delegates that we have nominated have come from the larger cities. I believe it is well that we should have those in the rural districts represented. I have known Dr. DeGurse for many, many years. I have known his interest in medicine; I have known his personal character, and I take great pleasure in seconding the nomination of Dr. DeGurse, of Marine City.

DR. WENGER: I take pleasure in nominating Dr. R. H. Denham to succeed himself as alternate delegate to the American Medical Association. He requires no comments on his service.

DR. LEDWIDGE: I don't know either of these two gentlemen or Dr. Gorsline, but I feel that a man who has run so closely for delegate should have a chance at alternate, and I would like to nominate Dr. Gorsline.

THE SPEAKER: Dr. Gorsline has been nominated.

DR. WENGER: I support the nomination.

DR. SPRINGER: I move that the nominations be closed.

DR. CASSIDY: I second the motion.

The motion was voted upon and carried.

THE SPEAKER: The tellers will distribute the ballots.

The attention of the Speaker has just been called to the fact that Dr. L. Fernald Foster, who has been an alternate delegate, has resigned. Therefore, it is necessary that three alternates be elected.

DR. STICKLEY: In view of the fact that we have only three names up I make a motion that we suspend the rules.

DR. LUCE: The Secretary has just read an extract governing this particular feature. Inasmuch as seniority must prevail according to our rules and regulations, it is necessary that we proceed to ballot, and the one receiving the highest number of votes will be the ranking alternate.

THE SPEAKER: The Chair accepts the correction. On the other hand, when you vote I take it for granted that with three men in the field the thing will be a tie vote, and we will have to revert to the action which has been taken for a number of years. The names will be put into a hat and drawn out. You are voting for three alternate delegates.

DR. LUCE: If I may be allowed to intrude again, each of these men will be nominated. There is no doubt about that. However, we may have a preference in the final tally; and he is going to outrank the others in seniority.

THE SPEAKER: I grant that perhaps you are right. Nevertheless, you will elect three.

DR. LUCE: But not all will vote for all three. Several will vote for only one, several will vote for two, and in the final analysis the tabulation of those respective votes will determine their seniority.

THE SPEAKER: It might so happen, but I believe that the experience of past Speakers as well as the present Speaker has shown us that on occasion we have had them all voted for.

DR. RICHMOND: A point of order. You made an announcement to us that Dr. Foster had resigned. Since that announcement no nomination has been made to succeed Dr. Foster. The nominations on the board were for the two vacancies announced.

Therefore, nobody has been nominated to succeed Dr. Foster at the present time.

THE SPEAKER: I think you are quite in order, but then you may go ahead and vote for two out of the three, and we will have to have another election for alternate to succeed Dr. Foster. The Chair will therefore rule that you, at the present time, vote for two out of three as originally instructed.

DR. LUCE: Mr. Speaker, again I wish to interrupt. I wouldn't be able to determine seniority under such a procedure.

THE SPEAKER: I question it, because the third candidate coming up might outrank the previous two that you have elected. Therefore, would it be proper to reopen the nominations?

DR. R. L. WADE (Branch): Why not number your candidates "1," "2," and "3"?

THE SPEAKER: But you are about to have another candidate.

These three have been listed on the board. We were asking for two. Since that time a resignation has crept upon us which we didn't know about, and we must permit another nomination to be made.

DR. TOSHACH: I make a motion that we suspend the rules and that we vote upon these three men to fill the three places that are vacant.

DR. SPRINGER: I second the motion.

The motion was voted upon and carried.

DR. GREENE: I move a reconsideration of the vote to close the nominations for alternate.

DR. RICHMOND: I second the motion.

The motion was voted upon and carried.

DR. TENHOUTEN: I thought, when you read that article pertaining to the election of delegates, that they were to be elected enmasse. I wish you would read that again.

The Secretary reread the provision of the By-Laws governing the election of alternate delegates to the American Medical Association.

THE SPEAKER: We are really voting on them enmasse, aren't we?

DR. TENHOUTEN: If you elect two to succeed two and then elect only one to succeed one, then the one man will have the greatest number of votes.

THE SPEAKER: But we have reopened nominations, so we are not having a separate ballot on any one alternate. Are there any further nominations?

DR. SPRINGER: I move that the nominations be closed.

DR. GREENE: I second the motion.

The motion was voted upon and carried.

THE SPEAKER: The nominations are closed. The names of DeGurse, Denham, and Gorsline are before you for the three alternate delegates.

The tellers will distribute the ballots.

THE SECRETARY: Forty votes are recorded for DeGurse, twenty-two for Denham, and forty for Gorsline.

THE SPEAKER: Your Speaker knows full well that for several years when this thing came up there were ties, and it was decided that good sportsmanship be shown. Your By-Laws call for a vote. If you care to stay here all afternoon, it is all right with me. Shall we proceed according to the By-Laws?

DR. LUCE: Am I correct that we are electing three candidates?

THE SPEAKER: We are.

DR. LUCE: Then the determination of the tie vote relative to seniority should be made by the Chairman or Speaker of the House drawing the names of DeGurse or Gorsline from a hat, the first out the senior.

THE SPEAKER: Then we will have to suspend the regular rules. Do you make a motion to suspend the rules?

DR. LUCE: I move that we suspend the rules and that that be the procedure.

DR. CHRISTIAN: I second the motion.

The motion was voted upon and carried.

THE SPEAKER: Thank you: I take it for granted that these two gentlemen are good sports.

The name of Dr. DeGurse was drawn by the Speaker.

THE SPEAKER: The Speaker declares Dr. T. E. DeGurse elected senior alternate delegate, Dr. Gorsline second, and Dr. Denham third.

Thank you, gentlemen.

XVII (8). PLACE OF ANNUAL MEETING

Next is the choice of the place of the next annual session.

DR. WENGER: Due to the fact that I understand there are no invitations or applications for that honor, I move that this body allow The Council to exercise its prerogative in choosing a place and letting us know where it is.

DR. CHRISTIAN: I second the motion.

The motion was voted upon and carried.

XVII (9). PRESIDENT-ELECT

THE SPEAKER: The next is the election of a president-elect.

DR. CURRY: On behalf of the Flint delegation I take great pleasure in placing the name of Dr. Henry Cook before you as nominee for the office of president-elect of the Michigan State Medical Society. His service as Chairman of The Council speaks for itself.

DR. LUCE: I am not speaking for the Wayne delegation; I am speaking for myself personally. There are two requisites required in our executive officers. One is a high ideal of the quality of medical service; the second is that the laborer is worthy of his hire. The candidate whom I shall mention has these two factors as the dominant traits of his personality. Personally, I take pleasure in seconding the nomination of Dr. Henry C. Cook, of Flint.

DR. CHRISTIAN: It is a privilege to participate in the nomination of this man, as a result of the several years that we have known him and watched him work, and I believe that I am speaking for the average delegate, the average committeeman of the Michigan State Medical Society who has seen him. He has everything that it takes to lead us on and upward. I second the nomination of Dr. Henry Cook, of Flint.

DR. GREENE: As a delegate from the nominee's district, he also being a native son of my county, it gives me great pleasure to second the nomination of Dr. Cook.

DR. SHEETS: Eaton County has always been a strong advocate of the reward of merit. We bring into this state convention the same spirit, and it is a pleasure for me, on behalf of Eaton County, to support the nomination of Dr. Henry Cook.

DR. BROOK: I move that the rules be suspended and that the Secretary be instructed to cast the unanimous ballot of this House for Dr. Henry Cook for president-elect.

DR. STRYKER: I second the motion.

The motion was voted upon and carried.

THE SECRETARY: Mr. Speaker, your Secretary takes great pleasure in casting the unanimous ballot of the House of Delegates for Dr. Henry Cook as president-elect.

THE SPEAKER: I therefore declare Dr. Henry Cook elected president-elect of the Michigan State Medical Society. It gives me great pleasure to invite Dr. Henry Cook to the stage.

Those in attendance arose and applauded.

THE SPEAKER: Gentlemen, I present the president-elect, Dr. Henry Cook.

DR. COOK: My Friends and Brothers (because that is the spirit in which we should work): You have conferred upon me the highest honor that I could ask for in my life's work. I prize the opportunity to serve the medical profession of the State of Michigan second only to that of serving my own family, and the only thing that I ask of you is that you will serve the profession of the State of Michigan and the public first, however, because our interests go hand in hand in that same spirit. You may oftentimes be called upon to render that service, and I expect and know that I will receive that coöperation, because it is a service that is well worth while.

I thank you again, gentlemen, for this honor, and I only hope that you will have the same feeling toward me two years from now that you have at this time. I shall endeavor to merit it.

I thank you. (Applause)

XVII (10). SPEAKER OF HOUSE OF DELEGATES

THE SPEAKER: The next order of business is the election of a Speaker of the House of Delegates. Dr. Riley took the Chair.

THE VICE SPEAKER: Nominations are now in order for the office of Speaker.

DR. SNAPP: I take great pleasure in nominating Dr. Frank E. Reeder to succeed himself as Speaker of the House of Delegates of this Society.

DR. STICKLEY: I second the nomination.

DR. BRASIE: I second the nomination.

DR. CASSIDY: I move that the rules be suspended, that the nominations be closed, and that the Secretary cast the unanimous ballot for Dr. Reeder for Speaker of the House.

THE SECRETARY: Mr. Vice Speaker, your Secretary does so cast.

THE VICE SPEAKER: I declare Dr. Frank E. Reeder elected Speaker of the House.

DR. Reeder resumed the Chair.

THE SPEAKER: Thank you very much. I am much obliged.

XVII (11). VICE-SPEAKER OF THE HOUSE OF DELEGATES

The next order of business is that of the election of a Vice Speaker of the House of Delegates.

DR. KEYPORT: I move the nomination of Dr. Philip A. Riley as Vice Speaker of the House.

DR. O'MEARA: I move that the nominations be closed and that the Secretary be instructed to cast the unanimous ballot of the assembly for Dr. Riley for Vice Speaker.

DR. BIDDLE: I second the motion.

The motion was voted upon and carried.

THE SECRETARY: Mr. Speaker, your Secretary does so cast.

THE SPEAKER: I therefore declare Dr. Philip A. Riley elected Vice Speaker of the House of Delegates.

I believe, gentlemen, so far as I know, that that about concludes our session.

DR. BROOK: Gentlemen of the House, may I take this opportunity to express to you my sincere appreciation for reflecting me as delegate to the American Medical Association. You have honored me this way for many years and I want to tell you that I thank you from the bottom of my heart for the honor you have bestowed upon me. (Applause.)

THE SPEAKER: There seems to have been some information given out here that, owing to the fact that there were amendments passed to the By-Laws which, of course, put them into effect immediately after they were accepted and adopted, that we must elect a Secretary. Can the Chair be informed? Heretofore the Secretary has been elected by the Council. Can anyone inform the Chair? Is it

now proper to elect a Secretary? Dr. Luce, have you any knowledge of that?

DR. LUCE: May I ask the Secretary to read that particular section of the By-Laws governing the election of Secretary of the Society?

THE SECRETARY: Article 8, Section 2 of the Constitution provides that the President, President-Elect, Councilors, the Speaker and Vice Speaker shall be elected annually by the House of Delegates. The Secretary, the Editor, and the Treasurer shall be elected by the Council at its annual meeting in January of each year.

The amendment is to the By-Laws.

DR. LUCE: Dr. Ekelund, was the article that you read a part of the Constitution or the By-Laws?

THE SECRETARY: Of the Constitution, Article 8, Section 2. There was an amendment proposed at the last session of the House of Delegates last year which can be acted upon today, as I see it.

DR. LUCE: Then I understand that that particular portion of the Constitution has conformed with the requirements of the Constitution, having laid over one year. Am I correct?

THE SECRETARY: Yes.

DR. LUCE: I would interpret it that inasmuch as a change in the Constitution takes effect immediately, we are now proceeding under the Constitution as changed.

THE SECRETARY: It hasn't been changed. The amendment was submitted last year, but it hasn't been acted upon this year.

This was an amendment to the By-Laws. There is no change in the Constitution that I can find.

THE SPEAKER: Is there anything more to come before this House? If there is, let's take it up in the proper way.

DR. COOK: Mr. Speaker, in view of the fact that this House introduced a resolution to change the Constitution a year ago, and it has not been acted upon, it certainly is in order to act upon it, and it is not keeping faith with the House of Delegates if it is not given an opportunity to do so, it would seem to me. I have no interest in it. Certainly anything which has laid over should be acted upon. It is in the minutes, isn't it?

THE SECRETARY: It is published on page 92 of the handbook of the House of Delegates. It is No. 19. The House had presented to it a proposed amendment to Article 8, Section 2 of the Constitution, to provide for the election of the Secretary by the House of Delegates instead of by The Council. That was regularly submitted last year and had to lay over for one year, and should be acted upon today.

THE SPEAKER: If this is the fault of the Speaker, I assure you that I desire to apologize to the House, but it would seem to me that someone should have informed the Speaker of this necessary legislation at the particular time. This matter, as the Speaker sees it, which was laid on the table for one year, should have been taken care of. Therefore, it is under "Unfinished Business," and if the House so desires at this time, it may suspend the rules and open this up under the head of "New Business." I believe we have a right to take action.

DR. GRUBER: I move that the House of Delegates revert to the order of unfinished business.

DR. WENGER: I second the motion.

The motion was voted upon and carried.

THE SECRETARY: This was published in the November, 1935, issue of THE JOURNAL.

THE SPEAKER: What is your pleasure?

DR. LUCE: Again I want to ask a question. I don't think it can be answered except by reference to the Stenotype notes. Was this particular part re-

REPORT OF SEVENTY-FIRST ANNUAL MEETING

ported by your Reference Committee on Constitution and By-Laws?

THE SPEAKER: So far as the knowledge of the Chair is concerned, I believe not. I have no recollection of such. Furthermore, we are not under the head of "New Business." If we were to open this under the head of "New Business" it would require a two-thirds vote of the entire House, which we could not produce at this time. So far as the knowledge of the Speaker goes, I have no recollection of its having been read here.

DR. PINO: It did not come up at the Reference Committee meeting at all, this year.

THE SPEAKER: I think it is just too bad, and that it should be acted upon.

DR. PINO: We knew nothing about it.

DR. GRUBER: Is it necessary to refer it to a Reference Committee?

THE SPEAKER: It was referred to them a year ago.

DR. GRUBER: Where does it say in the Constitution that it must be referred to a Reference Committee?

THE SPEAKER: I don't know that it need be, except for formal introduction. I don't believe it would be necessary.

DR. RILEY: I would like to make a motion that the amendment as printed in the handbook be adopted.

DR. GRUBER: A point of order. I believe we have not voted on returning to the order of unfinished business yet.

THE SPEAKER: We have.

The Chair would like the attention of everybody, please.

DR. RILEY: I move that the amendment as printed in the handbook on page 92, Article 19, be adopted.

DR. CHRISTIAN: I second the motion.

DR. HENRY R. CARSTENS (Wayne): This amendment is not printed here. Possibly the delegates do not know what they are voting on.

May we point out that in adopting certain By-Laws this morning the intent of the House was quite clear, because of the duties of the Secretary, which were fully defined, as to from what source his appointment derives and who fixes his salary. That is entirely in accord with the Constitution as

we have had it up until today. This is a marked change in the Constitution that will plainly be at variance with the By-Laws that we adopted this morning. This morning nobody brought up, so far as I know, that particular point, and the duties as specified there and the source of this appointment are quite clear and were indicated as being acceptable to the House by the adoption of the amendment to the By-Laws. This is in direct variance with that, and would again result in conflict with the By-Laws.

DR. GRUBER: I would have to disagree with Dr. Carstens, of Wayne. I didn't hear anything read or see anything that said anything about who was going to elect the Secretary. It just fixed his salary. The election is provided for in the Constitution, not in the By-Laws. This is an amendment to the Constitution. There is no variance so far as I can see. I am willing to be shown.

DR. TENHOUTON: It think it would be a good thing to vote on this amendment now and I would be in favor of voting it down. I don't see how the different delegates from around the state can possibly come down to a convention and know enough about any man to determine if he would make a good Secretary or not. I think the election of a Secretary should be left up to the unit of our organization that this Secretary has to work with and work for, and that is our Council. We elect a Council to take care of these men. I certainly would be in favor of voting down any amendment that would put the election of the Secretary back into a big body like our House of Delegates.

DR. LUCE: Mr. Speaker, I doubt the validity of any action we might take now. I therefore move that this matter be laid on the table for one year.

DR. GRUBER: I second the motion.

THE SPEAKER: The motion to table is not debatable. Those in favor say "Aye." Opposed, "No." The motion is carried.

XVIII. ADJOURNMENT

DR. GRUBER: I move that we now adjourn.

DR. GREENE: I second the motion.

The motion was voted upon and carried, and the session adjourned at 1:35 o'clock p. m.

THE JOURNAL

OF THE

Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOL. 35

DECEMBER, 1936

No. 12

PLACENTAL EXTRACT (IMMUNE GLOBULIN-HUMAN) WITH SPECIAL REFERENCE TO ITS USE IN THE PREVENTION AND MODIFICATION OF MEASLES*

R. CANNON ELEY, M.D.†

BOSTON, MASSACHUSETTS

In 1933 McKhann and Chu⁷ published the results of their study of the immunologic activity of various protein fractions which they had obtained from the human placenta and at that time suggested their possible clinical applications. This morning I would like to review briefly the results which have been obtained with these antibody solutions, giving particular reference to the use of placental extract (Immune Globulin-human) in the prevention and modification of measles.

As the method for the preparation of the extract has been previously described, it is not necessary to discuss it at this time.

However, it should be recalled that the 2 per cent salt extract placentas obtained from healthy, non-syphilitic women yielded protein fractions that (1) prevented or modified measles in non-immune individuals who had been infected by the virus; (2) neutralized diphtheria toxins; (3) blanched scarlet fever rashes when injected intradermally into patients; and (4) neutralized the virus of poliomyelitis in experimental animals. The antibodies for the virus diseases (poliomyelitis and measles) were present in all globulin fractions whereas the antitoxins for scarlet fever and diphtheria were found only in the more soluble pseudo-globulin fractions. This statement would suggest that these various fractions were isolated in

their pure states. Such differential precipitation was, however, practically impossible, as the demarcation between the various fractions is not a sharp line but is actually a zone. Thus, in the preparation of any one fraction a certain degree of overlapping of the proteins occurred.

At the present time, the globulin fractions have proven to be of definite clinical value against the virus of measles for it has been demonstrated that this disease may be modified or prevented by the intramuscular injection of the extract.^{1,3,5,6,8} However, the effectiveness of the procedure depends upon such factors as dosage, potency of material employed (i.e. antibody content), type of exposure, time of administration in regard to exposure, and the age and size of the patient. Therefore, in considering the merits of this form of passive immunization as compared to the results which may be obtained by the use of convalescent serum, adult immune serum and adult immune whole blood, the above named factors must be duly considered (Table I).

*From the department of Pediatrics, Harvard Medical School, the Department of Communicable Diseases, Harvard School of Public Health, and the Children's and Infants' Hospitals, Boston, Massachusetts. Presented at the seventy-first annual meeting of the Michigan State Medical Society, Detroit, September 24, 1936.

†R. Cannon Eley, M.D., graduated from the Medical Department of University of Virginia, 1925. He is Associate in Pediatrics and Communicable Diseases, Harvard Medical School; Associate Visiting Physician, Children's Hospital, Boston; Associate Physician, Infants' Hospital, Boston.

TABLE I. PASSIVE IMMUNIZATION

Method	Dosage
Convalescent Serum	4-6 c.c.
Adult Immune Serum	15-20 c.c.
Adult Immune Whole Blood	30-40 c.c.
Placental Extract	2-6 c.c.

FACTORS INFLUENCING PASSIVE IMMUNIZATION	
1.	Potency of material employed
2.	Dosage
3.	Time of administration
4.	Age of patient
5.	Degree of exposure

A rigid study of any prophylactic measure for measles *must* include those individuals who have been *intimately* exposed to the disease, such as in private homes, and not simply those who may have been *indirectly* in contact with the infection. An explanation for the marked difference between the successful results obtained with patients treated because of exposure in hospitals as compared with those treated for exposure in homes clearly illustrates this point, for undoubtedly many individuals who receive prophylactic therapy while in institutions actually are not infected. This would be particularly applicable in those hospitals that employ the so-called cubicle system or when "isolation precautions" are enforced. Table II demonstrates the results which have been obtained following the intramuscular administration of the extract to individuals who were intimately exposed (and therefore probably infected) as well as those who were indirectly exposed. If the results obtained in the group who were *intimately exposed* are compared with the published figures of Morales and Mandry,⁹ Park and Freeman,¹¹ Levinson,⁴ Schick and Karelitz,² and Nabarro and Signy¹⁰ (the patients of these observers received convalescent serum within five days or less after exposure) it will be noted that there is very little difference between the effectiveness of placental extract and convalescent serum. This would suggest that placental extract is as effective as convalescent serum when employed in the prophylaxis of measles. This suggestion is more than substantiated in Table III which shows that although the percentage of patients *completely protected* is greater in the group that received convalescent serum than in the group treated with placental extract, yet the percentage of *fail-*

ures is less with placental extract than with convalescent serum.

One of the important questions that must be considered when any therapeutic measure is being employed is the possible untoward effects of the procedure upon the patient. Such manifestations, which usually are referred to as reactions, may be local or systemic in nature and have been noted following the institution of prophylactic therapy in measles. The fact that convalescent serum usually may be injected in adequate therapeutic amounts with only slight, if any, local or systemic reaction has made this method superior to the employment of adult immune serum or adult immune whole blood, for when these latter substances are administered in amounts adequate to obtain therapeutic results, an area of tenderness, edema and discoloration, not infrequently develops at the site of the injection.

Local and systemic reactions have been observed following the intramuscular administration of placental extract. As one might expect, these reactions occurred with greater frequency during that period of time when the extract was first being prepared and when the method of preparation had not reached the present stage of refinement. In Table IV an effort has been made to tabulate all of the reactions, regardless of how mild or how transient, that have been noted following the use of the extract and from these statistics it would appear that neither the frequency nor the severity of the reactions is sufficient to contraindicate the use of the material as a prophylactic measure in the control of a disease as serious as measles.

Robinson and McKhann⁷ have recently reported the results obtained following the *oral* administration of the extract to 109 children who were intimately exposed. There were no reactions to this form of administration and although the extract was not as effective as when injected intramuscularly, yet the results suggest that such a form of treatment may be developed. The advantages of this mode of administration do not need to be discussed.

The selection of patients for modification or prevention of measles necessitates not only a consideration of the individual, but also an appraisal of the circumstances which resulted in the patient's exposure to the disease. In considering the patient, the first

PLACENTAL EXTRACT IN PREVENTION OF MEASLES—ELEY

TABLE II. PLACENTAL EXTRACT FOR PREVENTION OR MODIFICATION OF MEASLES
INTRAMUSCULAR INJECTION

	Intimate Exposure				All Exposures	
	Given to Protect 1-4 Days 399 Cases		Given to Modify 5-12 Days 837 Cases			
Protected	229	57.4%	347	41.5%	1489	66.6%
Modified	144	36.1%	426	50.9%	634	28.4%
Failed	26	6.5%	64	7.6%	114	5. %

TABLE III. PATIENTS TREATED FOR PROTECTION OR MODIFICATION*
All Types of Exposure

Procedure	No. Cases	Protected		Modified		Failed	
Adult Serum	584	329	56.4%	139	23.8%	116	19.8%
Conv. Serum	1627	1227	75.4%	273	16.8%	127	7.8%
Plac. Extract	2237	1489	66.6%	634	28.1%	114	5.0%

*Statistics for adult immune serum and convalescent serum obtained from the literature.

Statistics on placental extract represent a compilation of the results of the use of this material in a study conducted jointly by the Department of Pediatrics, Harvard Medical School, and the Massachusetts Antitoxin and Vaccine Laboratory.

TABLE IV. PLACENTAL EXTRACT-REACTIONS

		Local				Febrile			
		Total		Moderately Severe		Total		101 + T	
Total No. Patients	No reaction								
2133	1249 58.5%	761	30.9	100	4.7%	301	14.1%	62	2.86%

question to be entertained is whether prophylactic measures should be employed to prevent or to modify the infection. The solution to this problem depends upon the individual as measles and its complications should be avoided in chronically ill, debilitated, tuberculous and acutely ill children. However, if the patient is in good health and the accompanying circumstances do not contraindicate the procedure, efforts should be made to obtain modification as complications are infrequently encountered with this form of the disease. Furthermore, it is generally believed that permanent immunity may result from the properly modified form.

The circumstances which resulted in the exposure of the patient may, however, be of such a nature as to make protection rather

than modification desirable. Thus, in institutions such as foundling asylums, orphanages, and sanatoria it would be advisable to institute prophylactic measures as soon after the exposure as possible in order to eradicate the disease immediately. As the immunity conferred by the usual prophylactic measures is of short duration (four to five weeks), the converse of this is true when the disease occurs in epidemic proportions outside of institutions, for in such situations modification with resultant immunity (thereby gradually terminating the epidemic) is to be sought. If this is not obtained, individuals may repeatedly be re-exposed, necessitating further prophylactic treatment.

There is, as yet, very little data available as to the clinical application of the more

soluble globulin fractions which contain scarlet fever and diphtheria antitoxins. This is particularly true in the case of the latter. However, that some therapeutic value may be obtained from these solutions is strongly suggested by the fact that a positive Dick or Schick reaction may be reversed by the oral administration of these fractions. Furthermore, the classical rash observed in scarlet fever may be blanched by the intradermal injection of the material (12). The presence of antibodies that will neutralize the virus of poliomyelitis has been demonstrated by the intracerebral injection into monkeys of a solution containing the virus and the extract; it has not been advocated as a therapeutic measure.

Summarizing, one may say that adequate clinical evidence has been presented to establish the value of placental extract as a pro-

phylactic measure for modification or prevention of measles, but that further studies are necessary before the fractions containing scarlet fever and diphtheria antitoxins and neutralizing substances for the virus of poliomyelitis can be employed as either prophylactic or therapeutic procedures.

Bibliography

1. ELEY, R. C.: *New Eng. Jour. Med.*, 213:195, 1935.
2. KARELITZ, S., and SCHICK, B.: *Jour. A. M. A.*, 104: 991, 1935.
3. LANING, G. M., and HORAN, T. N.: *Jour. Mich. State Med. Soc.*, (Dec.) 1935.
4. LEVINSON, S. O., McDOUGALL, D., and THALHIMER, W.: *Ill. Med. Jour.*, 63:258, 1933.
5. LEVITAS, I. M.: *Jour. A. M. A.*, 105:493, 1935.
6. MCGAVRAN, E. G.: *Jour. A. M. A.*, 106:1781, 1936.
7. MCKHANN, C. F., and CHU, FU TANG: *Jour. Inf. Dis.*, 52:268, 1933.
8. MCKHANN, C. F., and CHU, FU TANG: *Am. Jour. Dis. Child.*, 45:475, 1933.
9. MORALES, E. G., and MANDRY, O. C.: *Am. Jour. Dis. Child.*, 39:1214, 1930.
10. NABARRO, D. N., and SIGNY, A. G.: *Brit. Med. Jour.*, 1:12, 1931; *ibid.* 2:599, 1931.
11. PARK, W. H., and FREEMAN, R. G., JR.: *Jour. A. M. A.*, 87:556, 1936.

SUBTURBINAL ETHMOIDECTOMY IN THE TREATMENT OF UVEITIS

J. M. ROBB, M.D.

DETROIT, MICHIGAN

I believe that, in the minds of most of those interested in ophthalmology, the diagnosis of uveitis is not particularly difficult. The treatment of uveitis, however, and therefore its etiology, has not been so simple. All the standard textbooks supply the regularly recognized causes of uveitis such as syphilis, tuberculosis, gonorrhea, infectious diseases, trauma, sympathetic irritation and so forth. Seldom, however, do they put much emphasis upon the relationship that exists between sinus disease and the middle tunic of the eye, consisting of the iris, ciliary body and choroid. This relationship and its treatment is what I wish to present for your consideration today.

Infections of the maxillary sinuses produce their effect upon the uveal tract chiefly by toxic absorption in the same manner as the tonsils, teeth or any other focus of infection in the general system. It would seem, however, that the sphenoid and ethmoid sinuses have a very much closer relationship than that of the maxillary sinus with a much more direct method of influencing the uvea. This influence could be effected in three ways: First, the result of contiguous inflammation existing in the sinus which extends directly through the sclera to the uvea. Second, by a more indirect method and yet probably more effective; that is, the establishment of a passive congestion or hyperemia in these sinuses apparently by interfering with the circula-

tion of the uvea. Third, the reaction of tissue immunity producing an allergic inflammatory reaction. It is apparent that the site of a diseased process develops a tissue allergy which, when stimulated by the products of bacteria or toxins from a focus of infection, will produce an allergic inflammatory reaction in the sensitized tissue. Arthus phenomenon is probably an excessive reaction of a similar type. At least, in the cases I am presenting there was no evidence of empyema in the ethmoid or sphenoid. It was simply a hyperplastic condition and in some of these cases this factor was not very evident. Factors such as mentioned above might also play some part in the production of a sympathetic inflammation and a similar operation might well be tried. The effect of contiguous inflammation is so

apparent it needs no further explanation. But if we assume that the basic cause is due to stasis of the vascular supply of both the sinus and the eye it could be explained on the fact that both the ethmoidal and ciliary vessels come off the ophthalmic in immediate proximity; the ciliary just behind the ethmoid, and therefore could be readily blocked by the same process. The fineness of the anatomic structures of the eye, the ease with which small canals or spaces are blocked with exudate, the ease with which adhesions are established, binding together minute structures of the eye, make a fertile field for great functional change associated with small pathologic findings. It is, therefore, perhaps more difficult to establish the relationship between disease of the ethmoid and sphenoid and the eye than any other parts of the body in which you are dealing with gross structures.

Time does not permit the discussion of the other causes of uveitis. However, it would seem that the great triad of syphilis, rheumatism and tuberculosis, although still receiving necessary consideration, are not so frequently a cause as they used to be. The satisfactory treatment of these conditions eliminates them more easily from the field of causes.

One may well ask, "By what means do we choose those cases to be operated upon for subturbinial ethmoidectomy in the treatment of uveitis?"

All cases should receive the same exacting care as they always have but if, after considerable time of careful investigation and treatment, there is no result, a thorough consideration of the sinus should be made. A poorly ventilated nose, probably some deviation of the septum, a rather mossy appearance of the bulla ethmoidalis, a positive x-ray finding, should make one consider an operative procedure on the ethmoid and sphenoid. In so far as the nose itself is concerned, the operative procedure will be of benefit in encouraging ventilation and permitting satisfactory drainage even if it fails to relieve the uveitis. The presence of pus in the nose is not an essential; in fact, judging from my experience, the cases of hyperplastic ethmoiditis that have produced uveitis were entirely free from pus.

The operative procedure of subturbinial ethmoidectomy is a comparatively simple one if the anatomic relationships of the nose

are well understood. If they are not understood, I consider it one of the most dangerous operative procedures in surgery.

Case 1.—Miss H. T., aged forty-two, has had recurring attacks of inflammation involving both eyes since 1914. The usual course of events has been a transition of inflammation from one eye to the other, injection of each eye, and a diminution of vision during an attack. There was no diminution of vision following an attack. On April 20, 1936, the patient was admitted to the Diagnostic Clinic Service of Harper Hospital. The left eye had been acutely inflamed for one month previous to the admittance.

Examination of the left eye revealed a dilated pupil (mydriatic), moderate peri-corneal congestion and an increase in the vitreous reaction. The fundus was easily made out and was myopic in type. The right eye showed no evidence of acute inflammation. However, some scattered vitreous opacities were found, signifying previous involvement. The intra-ocular tension and visual fields of both eyes were found to be within normal limits.

After a complete check-up by all departments, no foci could be demonstrated except for accessory nasal sinuses. All laboratory work was negative including blood Kahn and Wassermann.

Examination of the nose and accessory nasal sinuses revealed a deviation of the nasal septum to the left, the entire upper section of the left side being poorly ventilated. It was felt that chronic ethmoid sinus disease existed especially on the left side.

The above contention was verified by x-ray examination. The x-ray showed slight clouding of the left frontal sinus, both groups of ethmoids, and the left antrum, with evidence of intra-nasal disease.

The patient was operated on April 27, 1936, the operation consisting of a submucous resection and a partial subturbinial ethmoidectomy.

Operative Report.—"The septum was badly deviated to the left. It was impossible to cocaine beyond the area of the left middle turbinate. There was definite contact pressure on the left side. The mucosa of the ethmoid area did not look particularly bad. The sphenoid sinus was investigated—no pathology found."

The patient was discharged April 28, 1936. Between April 28, 1936, and June 5, 1936, the eye showed remarkable improvement, so that on June 5, 1936, the evidence of the acute inflammatory process had completely subsided. The last examination was made on August 20, 1936. There has been no acute flare-up since operation. There was no evidence of inflammatory products remaining except for a few scattered vitreous opacities.

V.O.D. 20/30. V.O.S. 20/20.

Case 2.—Miss A. B., aged twenty-one, was seen on February 11, 1929. Nine weeks previously the patient broke a large needle, a piece of which struck her in the left eye. The fragment was removed, an x-ray was taken and no foreign body demonstrated. Examination of the left eye at that time revealed one posterior synechia at six o'clock. The vitreous chamber showed evidence of marked hemorrhage. The vision was practically nil except for shadows. Examination of right eye showed no evidence of pathology. V-20/20. The patient was hospitalized for six weeks, with no improvement of vision in left eye. A poor prognosis was given. She was not seen again until February 22, 1934, when she returned and stated that the right eye had been inflamed for two weeks. Examination of the right eye revealed an acute iritis with evidence of

early posterior synechia and punctate spots on surface of cornea.

The vision in the right eye was found to be 20/80; with a plus 1.25 DS the vision was brought up to 20/60. Examination of the previously injured or left eye, showed posterior synechia and punctate keratitis. There were many vitreous opacities present. The vision was still deficient except for shadows. The possibility of sympathetic ophthalmia was considered and the patient given HgI and KI. The inflammation apparently improved on the above treatment.

On March 29, 1934, the vision in the right eye was 20/30 #. The punctate spots on the posterior surface of the cornea were definitely clearing. On April 6, 1934, the vision in the right eye was 20/20. The vision in the left eye was 20/80. There were still some punctate spots on the posterior surface of the cornea. The vitreous exudate was definitely absorbing.

Because of the recurrent inflammatory reaction in both eyes over a period of years, and the fear of a sympathetic ophthalmia, it was deemed advisable to thoroughly investigate the case for possible etiology. So on April 23, 1934, the patient entered Harper Hospital. An extensive search was made for possible foci, but none was found except for accessory nasal sinuses. All laboratory work was negative, including blood Kahn and Wassermann.

Examination of the nose and accessory nasal sinuses revealed a deviation of the nasal septum and a hyperplastic ethmoiditis. X-ray examination supported the above findings. There was definite haziness of both groups of ethmoid cells and clouding of both antra.

The patient was operated on April 24, 1934; the operation consisting of a submucous resection, excision of both ethmoids and middle turbinates and a bilateral antrostomy. Operative Report.—“Both ethmoid areas were polypoid; this could not be determined as far as we could see preoperatively.”

• Patient was discharged April 25, 1934, at which time she could see 20/20 with the right eye and 20/100 # 2 with the left eye.

Her condition improved very rapidly post-operatively and on the last examination, May 22, 1936, she could see 20/20 with the right eye, and 20/40 with the left.

Outside of local eye treatment the patient had HgI, KI; sodium salicylate, milk injections, etc.

September 4, 1936, she reported *no inflammation since operation.*

V.O.D. 20/20-. V.O.S. 20/50.

Left eye diverges, has been present since injury.

Case 3.—J. J. McG., aged fifty-two, has had recurrent attacks of inflammation involving both eyes for

the past twenty-five years. Examination of the right eye revealed extensive post-synechia and exudate in pupil. Fundus detail was not made out distinctly. The vision in the right was 20/100 and was not improved with glasses. Examination of the left eye revealed three post-synechia and an opacity of the cornea at six o'clock. The fundus was congested and the outline of the disc slightly blurred. The vision in the left was 20/50-1 and with a plus 1D.S the vision = 20/20. A diagnosis of recurrent uveitis was made. Under treatment the patient improved and on January 6, 1931, the vision in the right eye was 20/50 and in the left eye 20/20. Between April 26, 1931, and February 13, 1933, the patient had recurrent attacks of acute inflammation involving both eyes. On February 13, 1933, the patient was admitted to the Diagnostic Clinic service of Harper Hospital, in the hope that the etiological agent might be found. The case was carefully examined by all departments and no foci demonstrated except for the accessory nasal sinuses. The laboratory work was negative, including the blood Kahn and Wassermann. Examination of the nose and accessory sinuses revealed a low grade chronic ethmoiditis and a deviated nasal septum to the left. The clinical findings were not verified by x-ray, however, as the x-ray revealed no evidence of frank ethmoid or sphenoid sinus disease.

The patient was operated February 16, 1933; the operation consisting of a submucous resection, excision of left middle turbinate and ethmoid, and a right subturbinar ethmoidectomy.

Operative report: “Did not think it was necessary to remove entire septum, except the anterior portion in order to satisfactorily expose the ethmoid area. The mucous membrane was thick and mossy, no pus present. Sphenoids explored—no pathology found.”

The patient was discharged February 20, 1933. Following the operative procedure the patient had two slight attacks of inflammation which cleared rapidly under local treatment.

The last examination on October 4, 1935, revealed that there had been no attacks of acute inflammation since June 6, 1935. The vision in the right eye was 20/50 # 1 and the vision in the left eye was 20/20.

Outside of local treatment the patient had salicylates, sweat baths, milk injections, etc., previous to the operation at varying intervals over the twenty-five years.

On September 9, 1936, the patient reported that she had been practically free from symptoms since June 6, 1935.

V.O.D. 20/200. V.O.S. 20/50.

Refractive error corrected.

V.O.D. 20/50-. V.O.S. 20/20.

Glossopharyngeal Neuralgia

According to W. B. Hoover and J. L. Poppen, Boston (*Journal A. M. A.*, Sept. 26, 1936), trigeminal neuralgia and glossopharyngeal neuralgia are alike in all respects except the location of the agonizing flashes of pain and the localization of the trigger areas which set off these paroxysms. The “trigger” areas in glossopharyngeal neuralgia include the pharyngeal wall, the tonsillar region, the base of the tongue and rarely the ear, while trigger areas of trigeminal neuralgia occur in the buccal mucous membrane and about the lips, nose and various areas on the face. When the first or second divisions of the trigeminal nerve are affected there should be little or no difficulty in the differentiation of these

two neuralgias, but when the third division of the trigeminal is involved a little more care must be exercised to differentiate it from the ninth nerve. Cocainization of the mucous membranes over the distribution of the ninth nerve will, as a rule, temporarily control the paroxysmal pain from this nerve. Medical and surgical treatment are available in the treatment of glossopharyngeal neuralgia. In the authors' experience trichlorethylene has been the only drug that has really been efficient in giving a marked amount of relief from this condition. It is administered by the patient's inhaling from 15 to 30 drops from three to four times a day. The surgical treatment of choice is the intracranial section of the ninth nerve in the posterior fossa.

CURRENTS AND COUNTER-CURRENTS IN OBSTETRICS AND GYNECOLOGY*

HAROLD C. MACK, M.D., F.A.C.S.†

DETROIT, MICHIGAN

"A medical man, as he goes about his daily business after twenty years of practice, is apt to suppose that he treats his patients according to the teachings of his experience. No doubt this is true to some extent; to what extent depending much on the qualities of the individual. But it is easy to prove that the prescriptions of even wise physicians are very commonly founded on something quite different from experience. Experience must be based on the permanent facts of nature. But a glance at the prevalent modes of treatment of any two successive generations will show that there is a changeable as well as a permanent element in the art of healing; not merely changeable as diseases vary, or as new remedies are introduced, but changeable by the going out of fashion of special remedies, by the decadence of a popular theory from which their fitness was deduced, or other cause not more significant. There is no reason to suppose that the present time is essentially different in this respect from any other. Much, therefore, which is now very commonly considered to be the result of experience, will be recognized in the next, or in some succeeding generation, as no result at all but as a foregone conclusion, based on some prevalent belief or fashion of the time."

* * *

"The truth is that medicine, professedly founded on observation, is as sensitive to outside influences, political, religious, philosophical, imaginative, as is the barometer to the changes of atmospheric density. Theoretically it ought to go on its own straightforward inductive path, without regard to changes of government or to fluctuations of public opinion."

Oliver Wendell Holmes. "Currents and Counter-Currents in Medical Science." An address delivered before the Massachusetts Medical Society, at the Annual Meeting, May 30, 1860.

"Currents and Counter-Currents in Obstetrics and Gynecology," the subject of this address, derives its inspiration and title from a remarkable essay written by Oliver Wendell Holmes seventy-six years ago. Holmes' essay, the greater part as lively and thought-provoking now as it was then, is worth re-reading. The physician-poet was a keen and critical observer. In this storehouse of telling phrases and opinions adroitly expressed, two statements are of particular interest when applied—as I shall attempt it—to contemporary practice in obstetrics and gynecology: First, that medical science is profoundly affected by outside influences, "political, religious, philosophical, imaginative." Second, that the main current of progress in medical thought and practice is beset by many counter-currents and eddies represented by fads, fashions and foolish theories which retard advance or even carry us backward for a time.

A quick glance at the contemporary scene suffices to demonstrate the truth of the observation that "political, religious, philosophical, imaginative" factors play a large part in dictating current thought in obstetrical and gynecological matters. The return of militant nationalism, for example, is bringing demands which will inevitably have an effect on birth rates. Witness the financial endowment of large families in Italy, the repudiation of legalized abortion in Russia and Germany's propaganda for "Aryan" supremacy with its flood of med-

ical literature dealing with sterilization, eugenics, race hygiene—all influenced if not directed by political pressure. The growth of a conservative attitude toward tuberculosis and pregnancy in at least some countries was motivated by a growing premium on fetal and child life brought about by declining birth rates and fears of neighboring nations with growing populations. The import of socio-economic factors in gynecological and obstetrical problems is equally clear. The rising toll of death and disability from abortion, and the increasing demands for contraceptive knowledge followed closely upon the economic depression. Problems of poverty, unemployment, food and shelter are important elements which cannot be overlooked in a consideration of maternal, fetal and infant mortality. The higher death rates in urban centers where, generally speaking, facilities for medical care are best, are doubtless due in large part to inferior social conditions. The Amer-

*Chairman's address read before the Section on Obstetrics and Gynecology of the Michigan State Medical Society, September 24, 1936.

†For professional note, see the June, 1936, *JOURNAL*, M.S.M.S., page 374.

ican way of living with its impatient emphasis on speed and efficiency, its philosophy of "Do Something," is undoubtedly an influence promoting the best as well as some of the worst features of American medical practice. The public demands, hence the physician must attempt speedy cures. Does the obstetrician apply "prophylactic forceps" or is it really, as Plass calls it, a "convenience forceps"? Holmes already saw this trend in his times when he described the tendencies of the "American medical mind" with its "sanguine enterprise, its self-confidence, its audacious handling of Nature, its impatience with her old-fashioned ways of taking time to get a sick man well." The hand of the Church is still active in medical affairs when a highly impractical theory popularized as "Rhythm" is supported to offset the encroachments of contraception. So much for the first thesis. Medical practice is indeed as sensitive "as is the barometer to the changes in atmospheric density."

Holmes' second contention, that the main current of medical thought is beset with counter-currents (often merely fads, fashions, and practices based on questionable theories), is applicable to our times as well. Present-day practice in obstetrics and gynecology affords many examples. Witness, as an instance, the old belief that eclampsia gives immunity—a dictum that is passing with growing evidence that this disease often recurs and leads, not infrequently, to permanent vascular and renal damage. Note the lessened emphasis on protein restriction in nephritis, and the greater emphasis on salt and even water. The old bogey, the "dry labor," is losing its terrors—but for it, in certain quarters, is being substituted another bogey: the radical teaching that the bag of waters is not an essential dilating wedge, but rather an impediment to labor that must be done away with to avoid dystocia. The furor for barbituric acid compounds, vitamins and hormones—not to omit the ballyhoo for alkaline powders and antiseptics that has popularized, *ad nauseam*, such phrases as "that acid condition" and "feminine hygiene"! Which are part of the current of progress, which are merely counter-currents, is sometimes difficult to decide. In other instances, however, the differentiation appears evident even now. Time alone will clarify some of these issues.

Let us begin with prenatal care, a contribution of American obstetrics of which we, as Americans, can justly be proud. None can deny that prenatal care has brought vast improvements in obstetrics over the old system of prenatal neglect. Nor can one help but regret that the public has not learned to avail itself fully of its benefits. Statistical studies devoted to maternal mortality have shown that good prenatal care was not obtained by the vast majority of women who died in childbirth—however, not because it was unavailable! The old belief that pregnancy and parturition are entirely natural, hence normal, must be qualified since these processes so often border upon and even enter the field of pathology. A perfectly normal process could not, each year, result in over 15,000 deaths. The general recognition of the potential dangers is fortunately gaining momentum among the laity and is displacing the *laissez faire* of an older day. The value of prenatal care is unquestioned.

And yet, in certain circles, there is patent evidence that the preventive aspects of prenatal care have been emphasized too much. In stressing the importance of thorough and regular examinations during the prenatal period, some have lost sight of the vital necessity for thorough and expert delivery care. Norman Miller's critique is apt: "No amount of prenatal care can compensate for poor care at the time of delivery, but good care at the time of delivery can often compensate for lack of prenatal care and can be the most patent single factor for good or bad obstetrics." This applies to the immediate outcome of confinement for both mother and baby, but also to the remote results. Months of good antenatal care in the well appointed office of a competent physician can be nullified in a few moments by complications arising in the ill equipped home or "maternity" hospital. Meticulous care during the prenatal period and during the first and second stages of labor may be vitiated by relaxed vigilance and inexperienced care during the critical third stage—the time when mothers die! No need to cite further examples. Pregnancy requires expert management of every phase by expert attendants qualified by training and experience to treat every emergency. The public is learning slowly—too slowly perhaps for its own good—what a French physician once said of childbirth: "Nothing is easier

when it is easy and nothing is more difficult when it is difficult."

With this in mind, the medical profession has, on its own initiative, taken many steps to safeguard motherhood. These measures far surpass those effected or attempted by legislation. The classification and supervision of hospitals by the American College of Surgeons, the granting of Fellowship in the College to only qualified surgeons, the certification of specialists by the American Board of Obstetrics and Gynecology, the development of greater facilities for post-graduate instruction in obstetrics and gynecology are noteworthy examples. All these moves were purely voluntary and were aimed to improve the quality of available obstetrical care and to establish yardsticks for qualification of institutions and individuals. The benefits to the public from these efforts, already great, will become greater as the public becomes more discriminating in seeking maternity care. Many institutions licensed by city and state unfortunately do not meet the rigid requirements of the American College of Surgeons. Medical practice acts too are in sad need of revision. These important problems require further attention.

One cannot dismiss the subject of prenatal care without mentioning at least one other unjustified emphasis, namely, that prenatal care prevents eclampsia. None will deny that efficient antenatal care permits, in many instances, the early recognition and treatment of impending convulsions. More cases of toxemia are no doubt now being recognized and treated before the convulsive stage than was the case in the past. So much is true and to the credit of antenatal care. But, is it proper to speak of eclampsia prevention when we only mean forestalling convulsions? And when, during the course of expert prenatal care, convulsions suddenly appear, "out of the blue," so to speak, as they may, can we then say that prenatal care is truly capable of prevention? The public has already been led to believe to some extent that such an occurrence is the result of neglect on the part of the physician—a false emphasis which, like Frankenstein's monster, may turn upon us! Until we find a cause for this disease of theories and devise a true prophylaxis, or even remedy, we had best be humbly silent about at-

tributing a genuinely preventive role to prenatal care in eclampsia. The enthusiasm for antenatal care has obviously gone too far and has provided several dangerous counter-currents.

A few comments on painless labor. Here again we note currents and counter-currents. Witness the glowing reports of those who herald "The Conquest of Pain" on the one hand, and the repercussions of recent date on the other hand, with their silly twaddle about "personality defects" resulting in women spared the zest of a "vital experience." These are mere eddies. The crux of the issue lies deeper.

To justify the use of pain-relieving drugs in labor seems almost an anachronism in these times when painless labor can be provided in the majority of cases and with complete safety for mother and baby. Beyond the aim merely to make the process of childbirth less unpleasant is the definite physical advantage gained by the mother who is spared the devastating effect of prolonged suffering. Recovery from the effects of labor is more rapid when the shock which comes from prolonged agony is minimized. Psychic trauma is also reduced. Fewer mothers now face the prospects of future pregnancies with fear and apprehension. Few who have enjoyed these benefits will welcome a return to the "old days" which, in this respect at least, were not so good. Nor will many physicians look back with pleasure to the times when labor was an endurance contest between the physician's good judgment and the importunities of the patient and her relatives "For God's sake, Doctor! Do something!" With successful obstetrical analgesia the physician can now permit labor to progress to a point where, at the most, a relatively simple operative procedure will, if necessary, effect delivery. Difficult mid-forceps and high forceps operations have become less frequent in well conducted obstetrical services where pain-relieving drugs are freely employed. And the total length of labor is not increased, perhaps it is even lessened. So much for the current of progress.

The counter-currents, however, are equally evident. Despite the obvious advantages, painless labor has its limitations and disadvantages. It is not always completely successful. It should not always be at-

tempted. The emphasis must be on proper administration under proper auspices. The time and place! There's the rub! Women have come to demand complete analgesia at all costs and under conditions which are often impossible. As a result of this demand and the physician's desire to relieve pain, the use of these powerful drugs is in danger of becoming too general for safety. Indications and contraindications will be overlooked. Entirely painless labor cannot be provided in the home or in the understaffed hospital without trained attendants available for each individual case. The cost of providing such trained personnel is beyond the means of many institutions. Obstetrical analgesia, properly administered and supervised, is costly.

There are still other counter-currents. The patient completely under the influence of pain-relieving drugs has little command of her expulsive powers during the second stage. Operative delivery, as a result, even though it may involve little more than the use of outlet forceps, is increased. More intervention means more danger of infection, more chance for trauma to mother and baby. Every operation, no matter how slight, requires skill. Instead of being made simpler, obstetrics is now more complicated; easier for the mother, but with an added element of danger if skillful attention is lacking. The free use of obstetrical analgesia in present day practice provides another argument for increasing emphasis on proper delivery care. So much for obstetrics.

Gynecological practice, too, has its currents and counter-currents. The time has happily passed when vaginal discharge is treated routinely by curettage, medicated tampons and by topical applications to the cervix of various germicides. A better understanding of the pathology of erosions and cervicitis, the development of the cautery and the recognition of the elusive trichomonad—all these have led to greater success in the treatment through the development of rational therapeutic measures. But here again a counter-current! The cautery and lately the conization method of treating cervical lesions are suffering from abuse through over-enthusiasm, ill advised and unskillful application. The bad sequelae (stricture, pelvic inflammation) show

clearly that restraint and expertness are necessary if these good methods are not entirely to fall into disrepute. Having learned to recognize the trichomonad we must not forget the gonococcus. In our enthusiasm we often commit the error of using an elephant gun to destroy a gnat!

So too with the newly popularized endocrines. Time was when the good surgeon was primarily an expert anatomist, later an expert pathologist as well. Now the good gynecologist must be anatomist, pathologist and also physiologist. A proper understanding of normal physiology is fundamental to the understanding of functional disturbances which underlie numerous symptom-complexes formerly attributed exclusively to infection or other causes. As a result of this development of our knowledge of female sex functions in the menstrual cycle the diagnosis of "chronic endometritis" has become a rarity, if not an absolute myth. The endocrine implications of menstrual disorders are becoming more generally recognized and more rational approaches to therapy are being developed. So much for the main current!

In the zeal, on the other hand, to interpret every gynecological disorder as a derangement of function, the physiological "slant" now brings with it a counter-current—a frequent loss of perspective with neglect of time-honored principles of treatment. Uterine bleeding, for example! Too often nowadays the syringe, loaded with some appropriate or inappropriate endocrine product advised by the detail man, is called into action at the first sign of menorrhagia, metrorrhagia, or even post-menopausal bleeding. Uterine carcinoma, as a result, may frequently be unrecognized because diagnostic curettage is neglected before therapy is begun. Curettage is as important now as ever before. Perhaps it is even more important since examination of the endometrium is at present our best method of diagnosing ovarian dysfunction. A plea then for diagnostic curettage lest chances for carcinoma cure be jeopardized and endocrine therapy fall into disrepute.

I shall not try your patience further. Changing interpretations of known facts, new applications of new facts are constantly altering the scheme of things. This is necessary to progress. But innovations often bring treacherous counter-currents.

They must be viewed with a critical eye. Even good measures may obstruct progress through over-emphasis and abuse. In trying to better we often mar what's well. We

must try to distinguish between the permanent and the transitory, for, as Holmes put it, "Experience must be based on the permanent facts of Nature."

A SIMPLE PLAN FOR THE TREATMENT OF DIABETES IN GENERAL PRACTICE

F. H. LASHMET, M.D., F.A.C.P.†
PETOSKEY, MICHIGAN

The general practitioner who treats diabetes must be not only physician but laboratory technician and dietitian as well. He must manage those patients who are compelled by circumstances to be treated at home with perhaps infrequent visits to the office. He hears patients object to insulin because of fear of "hypo injections," the cost, or the inconvenience of using it; and he faces countless other difficulties not encountered by his colleagues in the city in clinics and in hospitals. Regardless of how well informed he may be in the treatment of diabetes, he is often compelled to abandon well established forms of therapy in order to meet the unusual. Notwithstanding these difficulties, the general practitioner has one distinct advantage. The great majority of patients encountered by him have only a mild form of diabetes.

Before the discovery of insulin, the most successful treatment of diabetes depended upon periods of fasting. The glycosuria promptly disappeared in most of the patients and serious acidosis rarely developed. These facts prompted a metabolic study of several diabetic subjects during a fasting state. The data from only one subject will be presented at this time, since it is typical of the others.

This patient (G. G.) was a boy of eighteen years, having moderately severe diabetes. After three days of fasting the glycosuria disappeared and there was no ketonuria. The total energy expenditure (caloric requirement) for twenty-four hour periods was determined by the method described by Newburgh, Wiley, and Lashmet² and found on the fourth day of the fast to be 1,540 calories. The nitrogen contained in the urine and stool per twenty-four hours was 9.957 grams. This represented the metabolism of 60 grams of body protein (9.957×6.25). Since protein yields, on oxidation, 4 calories per gram, 240 of the total 1,540 calories expended per day were derived from body protein. After the first few days of fasting there is practically no glucose available for oxidation. Consequently, the remaining 1,300 calories were derived from the oxidation of body fat. This represents 136 grams ($1,300 \div 9.5$ Cal./gram) of body fat oxidized. This subject, then, during the fasting state was metabolizing 60 grams of protein and 136 grams of fat both obtained at the expense of body tissue.

Accepting the formula of Woodyatt,³ such a mixture contains 50 grams of available

glucose and has a fatty acid/glucose ratio of 3.0. Since there was no glycosuria nor ketonuria it is obvious that this subject had a "tolerance" for 50 grams of glucose and that a fatty acid/glucose ratio of 3.0 did not produce acidosis. With these facts known, a diet was constructed containing protein 50 grams, fat 135 grams, and carbohydrate 20 grams. Such a diet will yield 1,500 calories, 50 grams of glucose. It has a fatty acid/glucose ratio of 2.3. It is obvious that such a diet should be a substitute for the body protein and fat oxidized during the fast, imposes no more glucose for oxidation than that derived from body tissue during the fast and, finally, has less possibility of producing acidosis because of the lower FA/G ratio. As a matter of fact, the subject did not show glycosuria or ketonuria on the diet and there was practically no weight loss as was present during the fast. Consequently, the diet proved to be more than just a substitute for the fast. It had advantages over it.

Newburgh and Marsh¹ were the first to employ these facts in what is now commonly called their "high fat" diets. The second one in their series of diets is practically identical with the diet fed to the above subject and is the initial diet now employed by Newburgh. It has been used by him in thousands of patients with entirely satisfactory results.

With these experimental facts in mind and supported by an extensive experience in managing patients with the Newburgh

†Dr. Lashmet graduated from the University of Michigan, M.S., 1925; M.D., 1927. He was formerly Assistant Professor of Internal Medicine at the University of Michigan Medical School, Ann Arbor. At present, he is practicing internal medicine in Petoskey, Michigan.

TABLE A

FOOD VALUES FOR CALCULATING DIABETIC DIETS

(Revised January 1, 1934)

5% VEGETABLES	10% VEGETABLES	15% VEGETABLES	20% VEGETABLES
Asparagus	Beets	Artichokes—Globe	Beans—cooked
Avocado	Brussels Sprouts	Oyster Plant	Kidney
Bean Sprouts	Carrots	Parsnips	Lima
Broccoli	Dandelion Greens	Peas	Navy
Cabbage	Leeks	Soy Beans—cooked	Corn
Cauliflower	Olives—green	FRUITS	Horse Radish
Celery	Onions		Potatoes
Chard	Rutabagas		FRUITS
Chinese Cabbage	Winter Squash		
Cucumbers	FRUITS		
Egg Plant			
Endive			
Greens—Beet			
Greens—Mustard			
Kohlrabi			
Lettuce			
Okra			
Olives—ripe			
Peppers			
Pumpkin			
Radish			
Spinach			
String Beans			
Summer Squash			
Tomatoes			
Turnips			
Watercress			
FRUITS	SUBSTITUTIONS ALLOWED		
	100 grams 5 per cent Fruit		
	or Vegetable = 50 gms.; 10% = 35 gms.; 15% = 25 gms.; 20%		
	18 grams Bread or 10 grams Dry Cereal, Macaroni, Spaghetti, Noodles or		
	Crackers may be substituted for 200 grams of any 5% Fruit or Vegetable.		
Honey Dew Melon			
Lemon Juice			
Muskmelon			
Rhubarb			
Strawberries			
Watermelon			

types of diet, I have found that only one basic or skeleton diet is necessary in the treatment of diabetes in general practice. With a few additions to this single diet, one is able to construct and to teach every patient a simple plan.

Plan of Treatment

1. *Food Scales.* First of all a satisfactory food scale is demanded of every patient. Many are able to buy one immediately; others rent one from a few kept in the office for that purpose; and the remaining few are loaned one until more satisfactory arrangements can be made. Thus far, no serious difficulty has been encountered in being assured of weighed diets for every patient. Incidentally, no financial loss has been incurred with this plan.

2. *Food Tables.* Next the patient is given a mimeographed sheet on one side of which

is a classification of fruits and vegetables according to glucose (sugar) content. On the other side is listed the amounts of meats, milk, etc., containing the same amount of glucose as two eggs (See Tables A and B).

These are very useful tables in planning the diet since one can prescribe a certain amount of only 5 per cent fruit or vegetable per meal. The patient selects either all fruit or vegetable or enough of each to make the total weight allowed. Substitutions for other than the 5 per cent group may be made by decreasing the amount used in proportion to the glucose content (See Table A). The amount of meat, et cetera, is prescribed in the terms of the glucose content of two eggs.

3. *The Diet.* The skeleton diet is given to practically every patient at the beginning of treatment (See Table C). This diet

contains 1,500 calories, 50 grams of available glucose and is arranged so that this amount of glucose is equally distributed between each meal. It is an unusual patient whose glycosuria does not disappear within three to five days because there are but few diabetics who cannot tolerate 50 grams of glucose daily. If the glycosuria does not promptly disappear it is quite evident that the patient is, at that time, a severe diabetic and insulin and hospitalization are imperative.

4. *Means of Increasing the Skeleton Diet.* After the patient has been aglycosuric for three days on the skeleton diet, it may be increased in several ways. Each of the following three options increases each of the three meals 5 grams of glucose, or the total diet 15 grams per day. The calories vary according to the option selected.

Option A. Add to each meal of the skeleton diet 100 grams of 5 per cent fruit or vegetable. This raises the diet practically 70 calories per day.

Option B. Add to each meal of the skeleton diet 90 grams of 5 per cent fruit or vegetable and 5 grams of butter. This raises the diet practically 180 calories per day.

Option C. Add to each meal of the skeleton diet 90 grams of 5 per cent fruit or vegetable and 10 grams of cream (32 per cent). This raises the diet practically 160 calories per day.

TABLE B

SUBSTITUTES FOR THE AVAILABLE GLUCOSE
OF TWO EGGS

<i>Beef</i>		<i>Lamb</i>	
Boiled	54 gms.	Chops	67 gms.
Corned	80 "	Roast	70 "
Dried	47 "	<i>Milk</i>	105 "
Liver	60 "	<i>Oysters</i>	100 "
Liver and Bacon—	50 "	<i>Nuts</i>	
cooked	15 "	Black Walnuts	28 "
Roast	57 "	English	
Round Steak	70 "	Walnuts	30 gms.
Sirloin Steak	74 "	Peanuts or Peanut Butter	20 "
Tongue—boiled	66 "	Pecans	32 "
<i>Cheese</i>		<i>Pork</i>	
American	36 "	Chops	65 "
Cottage	50 "	Ham—baked	60 "
Cream	42 "	Ham—boiled	64 "
Swiss	43 "	Ham—bologna	70 "
<i>Chicken</i>		Ham—smoked	72 "
Stewed	50 "	Roast	68 "
Roast	50 "	Sausage—summer	47 "
<i>Duck</i>		<i>Frankfurters</i>	62 "
Roast	64 "	<i>Turkey</i>	
<i>Fish</i>		Roast	40 "
Codfish—salt	57 "	<i>Veal</i>	
Crabmeat—canned	84 "	Chops	68 "
Fresh	61 "	Roast	54 "
Salmon	62 "	Sweetbreads (raw)	80 "
Sardine	58 "		
Shrimp	56 "		
Tuna	56 "		
<i>Goose</i>			
Roast	72 "		

TABLE C

SKELETON DIET

Breakfast	Dinner	Supper
Eggs 2	Eggs or } 2	Eggs or } 2
Bacon 20	Substitute } 2	Substitute } 2
Cream (32%)..... 60	Cream (32%)..... 30	Cream (32%)..... 30
Butter 5	Butter or } 30	Butter or } 30
Fruit or } 5% 60	Mayonnaise } 30	Mayonnaise } 30
Vegetable } 5% 60	Fruit or } 5% .....120	Fruit or } 5% .....120
	Vegetable } 5% .....120	Vegetable } 5% .....120

This diet contains:

Protein—50 gms. : Fat—135 gms. : CHO—20 gms.

Calories—1500 Available Glucose—50 gms.

The options add to the Skeleton Diet the following constituents:

Option	Protein (gms.)	Fat (gms.)	Carbohydrate (gms.)	Calories	Available Glucose (gms.)
A	3.0	0	15.0	72	15.0
B	3.0	12.8	14.0	183	14.8
C	3.3	9.6	14.0	162	14.9

It is the best policy to raise the skeleton diet by only one of the above options at a time and wait at least three days. If no glycosuria develops, another one of the options may be added. By various combinations of the options it is possible to obtain any desired amount of available glucose and calories.

By employing a system of symbols the diets may be entered very quickly upon the records of the patients and translated easily at the time of future references. For example, if a patient had had the skeleton diet to which had been added Option A twice and Option B once, the formula for that diet may be recorded as S + A2 + B1. This would indicate immediately that the diet contained 1,820 calories and 95 grams

of available glucose. The exact menus can be easily and quickly obtained by copying the skeleton diet and adding to it the various options as indicated.

The plan just described is simple, safe, effective and flexible for both the patient and the physician. It is intended for use in that large group of diabetic patients which constitutes 85 per cent of all the diabetic patients encountered by the general practitioner. The smaller group with more severe diabetes will require special treatment which has been intentionally omitted from this paper.

Bibliography

1. NEWBURGH, L. H., and MARSH, P. L.: Arch. Int. Med., 26:647, 1920; *ibid*, 31:63, 1923.
2. NEWBURGH, L. H., WILEY, F. H., and LASHMET, F. H.: Jour. Clin. Invest., 10:703, 1931.
3. WOODYATT, R. T.: Arch. Int. Med., 28:125, 1921.

TREATMENT OF INFANTILE PARALYSIS

A. D. LA FERTÉ, M.D.†
DETROIT, MICHIGAN

For the purposes of discussion the treatment of infantile paralysis may be divided into three phases.

1. The acute phase—from the onset to the disappearance of the tenderness.
2. The convalescent phase—beginning at the end of the acute phase and continuing during the stage of spontaneous improvement—about two years.
3. The chronic phase—when the affection has become more stationary and deformities, if present, have become established.

The purpose of this paper is to take up the second, or convalescent phase, as it is during this time that most can be done to reap the benefit of a well treated acute phase, and to prevent the extreme deformities with the consequent severe and complicated operations of the third, or chronic, phase.

In the acute phase of this disease the efforts were confined to limiting the destructive process. We have now to bend our efforts toward the restoration of muscular power and the prevention of deformity.

As Lovett tells us, many muscles are weakened and some completely paralyzed because of injury to the nerve centers. Weakened muscles may be strengthened by exercise, and impulses sent from the brain to the muscle may be trained to find new paths. This is because the communications

between the nerve centers and the connections between the nerve centers and the muscles are very extensive and intricate, and most often not all the centers controlling one muscle are wiped out. As a result of this, physiotherapy is the treatment of greatest value.

We have before us a patient who has suffered a hemorrhagic myelitis with a general infection, which has destroyed or inhibited the function of certain nerve centers, the muscles controlled by the centers have been inactive and have wasted, the circulation is sluggish, and the general resistance is below par.

A thorough examination is made of the entire musculature of the body, and the strength of each muscle is entered on a special chart. The muscle strength is entered on the chart in one of the following five terms—normal, good, fair, poor, trace, or gone. By "normal" is meant that the muscle can perform a normal strength test, as, for example, a normal quadriceps can lift the

†Dr. A. D. La Ferté is Professor of Orthopedic Surgery, Wayne University Medical College, and Attending Orthopedic Surgeon, Receiving Hospital, Detroit. He is a graduate of Jefferson Medical College, Philadelphia, 1910.

body weight from the crouching position. By "good" we term a muscle that cannot come up to this normal test, but can overcome resistance. By "fair" we term a muscle that cannot overcome resistance, but can overcome gravity. By "poor" we term a muscle that cannot overcome gravity, but can perform its function by removing gravity. By "trace" we term a muscle that cannot perform any function, but may be felt to show some contraction, and by "gone" one in which no contraction can be felt.

After completion of the examination the plan of treatment is outlined. This consists in supporting the weakened muscles so that no strain is allowed to come upon them, and to institute physiotherapy to regain the lost strength.

It is desirable to have the patient in the upright position, both because of the general effect upon the patient, and because of the effect upon the individual muscle. Maintenance of the upright position demands muscle stimulus with the consequent increase of circulation. Fatigue is to be guarded against and in the case in which there is a paralysis of the back or abdominal muscles, or both, it will be advisable to keep the patient recumbent on a Bradford frame until such time as there is sufficient return of muscle power to allow the patient up with the aid of a back brace or supporting corset. Lateral curvature of the spine is to be watched for. This condition develops at this time and is often overlooked.

We must now devise braces which will prevent strain of the affected muscles, and will also be an aid in walking. This is very important, because too many children are allowed to lie around following the paralytic attack, and suffer marked contractions and deformities.

The most frequently paralyzed muscle of the body is the quadriceps extensor, the muscle which extends the leg upon the thigh. In walking with this muscle paralyzed, the knee does not lock unless the thigh be pushed back by the patient's hand at each step. This is needless effort on the part of the patient, as the condition can be helped by the application of a walking caliper. This is a splint having uprights on either side of the leg, with a ring about the upper ends encircling the thigh and having the lower ends attach to the shoe. There is no joint at the knee. If there be some ac-

NAME <u>Child 4056 years</u>														DATE OF PARALYSIS <u>Aug. 20, 1921</u>	
ADDRESS <u>1021</u>															
LEFT							RIGHT								
Oct.	Jan.	Dec.	Apr.	Mar.	Dec.	Sept.	Sept.	Dec.	Mar.	Apr.	Dec.	Jan.	Oct.		
9	22	23	25	11	1	29	29	1	11	25	23	22	9		
1921						1922						1923			
1523	1523	1523	1523	1523	1523	1523	1521	1521	1521	1522	1522	1523	1523		
Neck	good	fair	fair	fair	fair	poor	Neck	poor	fair	fair	fair	fair	good		
Back	good	good	good	good	good	good	Back	poor	fair	fair	fair	good	good		
Abd.	good	fair	fair	fair	poor	poor	Abd.	poor	poor	fair	fair	fair	fair		
Quadr.	good	fair	fair	fair	poor	poor	Quadr.	poor	fair	fair	fair	fair	good		
Foot	good	good	good	good	good	good	Foot	poor	poor	poor	poor	poor	poor		
Deltoid	good	good	good	good	good	good	Deltoid	poor	poor	poor	poor	poor	poor		
Triceps	good	good	good	good	good	good	Triceps	poor	poor	poor	poor	poor	poor		
Ext. Rot.	good	good	good	good	good	good	Ext. Rot.	poor	poor	poor	poor	poor	poor		
Ext. Flex.	good	good	good	good	good	good	Ext. Flex.	poor	poor	poor	poor	poor	poor		
Ext. Add.	good	good	good	good	good	good	Ext. Add.	poor	poor	poor	poor	poor	poor		
Ext. Abduct.	good	good	good	good	good	good	Ext. Abduct.	poor	poor	poor	poor	poor	poor		
Ext. Pron.	good	good	good	good	good	good	Ext. Pron.	poor	poor	poor	poor	poor	poor		
Ext. Sup.	good	good	good	good	good	good	Ext. Sup.	poor	poor	poor	poor	poor	poor		
Ext. Inf.	good	good	good	good	good	good	Ext. Inf.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor	poor		
Ext. Med.	good	good	good	good	good	good	Ext. Med.	poor	poor	poor	poor	poor	poor		
Ext. Lat.	good	good	good	good	good	good	Ext. Lat.	poor	poor	poor	poor	poor			

bracing has been done we proceed with physiotherapy.

Under the term physiotherapy, the following measures are to be considered:

- (a) Massage
- (b) Heat
- (c) Electricity
- (d) Muscle training

Massage.—Massage is unquestionably of benefit in the convalescent phase of infantile paralysis, if intelligently given; by this I mean that a general massage of the limb is not efficient. It is necessary to isolate the particular muscle or muscle group paralyzed, and by the proper stroking and kneading stimulate the flow of venous blood toward the heart. This emptying of the veins increases the flow of arterial blood to the part, and facilitates the flow of lymph. Massage also tends to empty the muscles of waste products. Thus muscle atrophy is in a measure overcome.

It must be understood that massage will not restore muscle power, and that it has no direct effect upon the disease.

Heat.—Heat renders the partially paralyzed muscle more capable in performing its function. The partially paralyzed foot which shows no voluntary motion whatever when cold, will show some motion after a few minutes of baking. This is probably due to two causes: first, to an elevation of temperature of the muscles to a point favorable to activity; and second, to a stimulation of the circulation.

Heat causes a dilatation of the surface capillaries of the skin and draws the blood from the deeper parts. This is followed by a contraction of the surface capillaries and a dilatation of the deeper vessels, so that the flow of blood in the affected limb is stimulated.

Heat given prior to, adds to the effectiveness of massage; since there is an increased amount of blood in the surface capillaries a greater volume is driven toward the center of the body, to be replaced by a similar volume returning to the limb.

Electricity.—The consensus of opinion is that electricity is of no benefit in the treatment of infantile paralysis. It may do harm by having the parents or patient feel that good is being accomplished and consequently have them neglect measures of known benefit.

Muscle Training.—It is at this stage of

the treatment that our thorough examination of each muscle plays its important part. A set of exercises is worked out and treatments begun. These treatments are best given in a bare room where there is little to distract the patient's attention and in the absence of parents or nurse, who, though greatly interested and with nothing but the child's interest at heart, can not help distracting the attention of the patient from the work at hand.

The treatments are given as follows: The patient is placed upon a specially constructed table with large surface, having a very smooth finish. The table is powdered to decrease the friction. This is done with a two-fold purpose: first, that the weak muscles may more easily move the limb across the slippery surface; and secondly, that if the child struggles, as it often does, at the beginning of these treatments, it is unable to secure a hold and pull away from the physiotherapist.

If a muscle is apparently without power the patient is encouraged to concentrate his attention on the attempt to perform the movement as it is carried out passively. If, as often happens, the muscles are able to carry the limb through only a part of the natural arc of motion, this motion is completed through its full arc by the attendant, without any pause in this motion, thus encouraging the patient not to allow any cessation in the muscle action. It is in just such a situation as this that we want concentration on the part of the patient, and must have no distracting influences. When the muscle has become able to carry the limb, unaided, through its full arc of motion, resistance is applied, and this resistance is so given that it is graduated from weak at the beginning of movement, to strong in the middle, and weak again at the end. The resistance is just a little less than would stop the movement.

These exercises are given three times each week by the physiotherapist and may be augmented at home on the intervening days, by some similar exercises by an intelligent mother or nurse. One day of complete freedom from exercises is allowed each week to prevent the patient becoming stale. If, as sometimes happens, the muscles lose some of the improvement gained, the treatments are cut down, as over-exercising and tiring the muscle stimulus are almost as bad as

having no muscle training at all. If the child is too young to understand the effort to be made, the ingenuity of the physiotherapist is called upon to discover a means to have the child attempt the desired motion. After much painstaking effort this can be accomplished.

Under physiotherapy there is a fifth measure which in some cases proves of great benefit—that is—exercise in water. As is well known, the buoyancy of water greatly reduces the weight of the body, and consequently a limb, in which there may be only slight active motion on the treatment table, becomes very active and easily controlled when under water.

It is well therefore to have these patients placed in the tub each day and encouraged to go through prescribed motions with the limbs immersed. The buoyancy of the water is increased by the addition of salt.

Another important consideration is that of balance. After being bedridden for a considerable length of time it is quite difficult for these patients to stand up, much less walk, even with the help of braces and

crutches. This is not because of paralysis entirely but also because of the loss of the sense of equilibrium. This may prove discouraging at first to the patient but after a time, with help, this sense is again developed and even though there is no noticeable improvement in muscle action, in two or three weeks the patient will get about nicely.

If after a long course of treatment we arrive at a point where some of the muscles have failed to respond, we enter upon the third, or chronic phase, of the infantile paralysis, which brings up the question of muscle transplants and the various other operative procedures too numerous and varied to be considered in a paper of this length.

To sum up: The proper handling of the case of infantile paralysis in the convalescent stage consists in an examination of the entire body musculature and a recording of the muscle strength of the involved muscles, and physiotherapy, which consists in baking, massage and training of these muscles. In the case seen early and handled in this manner a good prognosis can almost always be justified.

WHY A MEDICAL LIBRARY?*

ARCHIBALD MALLOCH, M.D. (McGill), F.R.C.P. (Lond.)

Librarian of the New York Academy of Medicine
NEW YORK CITY

I wish, in the first place, to thank you for the privilege of addressing the Wayne County Medical Society on the subject of medical libraries and I want especially to thank your Library Committee for their kind invitation. If I talk too plainly it is only because I am here as an ardent advocate of good libraries and I hope you will forgive me.

Detroit, according to the 1930 census, was the fourth largest city in the United States; today perhaps it has climbed up to a higher place and the value of its manufactured products is exceeded only by New York and Chicago. The largest medical libraries in the United States are the Army Medical Library, that at the College of Physicians of Philadelphia, the Boston Medical Library—and, by the way, the medical library which I have the honour to represent fits in somewhere close to the top. We have about 220,000 volumes, not counting duplicates.

The late Sir William Osler, so he said, used to judge a hospital by the merits of its pathological department, Sir George Newman took into account its out-patients department, and a third great man always con-

sidered its kitchens. Did it ever occur to you that perhaps a medical society should be judged by its library or at least by the library which its members use habitually? Where do you stand? On July 1, 1936, your Library, which as you all know was turned over to the Detroit Public Library in 1923, and constitutes its Medical Science Department, possessed 38,862 volumes. I understand that there used to be sufficient money to buy current material, and you had a special fund for the purpose of building up back files of periodicals, but since 1931 your resources have been cut until there is

*Read before the Wayne County Medical Society, Nov. 2, 1936.

very little left. I think you will agree with me that this state of affairs should be improved. Your Library, however, is well known in the circle of the Medical Library Association as your Librarian, Miss Dar-rach, has done yeoman service as the Secretary of the Association as well as in other capacities. Would you not like her to pre-side over a larger library?

Your Society is already doing important things for post-graduate education; for instance, every year the Beaumont Lectures are delivered under your auspices and you have your Orthopedic Lectureship Foundation. These are splendid, but they are not quite enough, it seems to me. One of the best ways to carry on post-graduate education, "the continued education of the doctor," as it is called nowadays, is to provide an adequate medical library, for the simple reason that it is impossible for the doctor to provide for himself at home a library that will satisfy his wants, although I do not deny that it is more convenient and comfortable to read in one's own house. He cannot buy very many new textbooks and it is not possible for him to purchase more than a very few medical magazines. At the risk of making a quotation which is already well known to you, I repeat what William Osler wrote in his essay "Books and Men": "To study the phenomena of disease without books is to sail an uncharted sea, while to study books without patients is not to go to sea at all."

I am not one who believes that we can make readers of everyone, for the appreciation of books and their value should begin in early youth in the family circle at home. There are some doctors who seem to practise their art very well without having recourse to libraries but they would be better practitioners did they read more. Practical experience is the best teacher but one should add to one's own experience by gaining something of the experience of others; after one has ceased to sit at the feet of his teachers during his medical course this can only be done by going on ward rounds with others there to criticize, through consultations, by attending and taking part in discussions at medical societies—and, finally, by reading books and journals which contain the experience others have gained and put down on paper. That is what books and articles are made of. Watch a doctor who

rather prides himself on not reading much, watch him when he comes to a library to write a paper which he has promised for a society. I have seen them many times and they have come to me and to others asking for help. This doctor says: "I wish I had learnt to use a library before," as he flounders about, unable to look up what has been written on the subject, and struggles to arrange his facts and commit them to paper in some sort of orderly fashion. As I have said somewhere before, there is not a physician who does not have a patient every year whose case should be published in the form of a brief note. This should not be done to add glory to himself but to help on other doctors and to add to the general sum of medical knowledge, as practically all papers are indexed in the *Quarterly Cumulative Index Medicus* or the *Index Catalogue of the Surgeon General's Library*. And how is a doctor to do this without the help of a good medical library?

I do not mean that medical libraries should be used only if one has to write a paper—far from it. Make notes of points concerning your patients' cases which you wish to look up and come with them to the library for a short time once or twice a week. Once formed, you will find that the habit grows on you—greatly to the increase of your own understanding and to the benefit of your patients. You will be surprised what other interesting things you will light upon accidentally in trying to answer the specific questions you have brought with you. It is quite possible even in the midst of a busy life to go several times a week to your medical library. Osler used to visit the Library of the Medical and Surgical Faculty of Maryland several times a week and browse for half an hour or so amongst the magazines and books. He did not forget, either, when he was in any library to speak to members of the staff and to give them some amusing words of encouragement.

Medical libraries are more esteemed amongst teachers in medical faculties than they used to be. There had always been some exceptions but certainly during the last generation the teachers have advised their pupils to look up things in the library much more frequently than was done formerly. The Osler method of sending to the library a pupil to look up a single def-

inite topic works very well indeed and I venture to say that we cannot gauge the benefit the student derives from such a visit and the searching out of an answer to one specific question. I know that by this method Osler fanned into flame the spark that many a man did not know was in him. I was not one of William Osler's pupils before graduating but I tried his method myself when teaching at McGill and I know it works. In addition to visiting the libraries as individuals, students may go in a body. Ever since the idea of classes of instruction for the student in the use of medical libraries was first suggested by the late Dr. Charles D. Spivak of Denver, a few medical schools, notably the McGill Medical Faculty, have introduced them into the curriculum. I am sure that the medical student upon graduation today feels more acutely the lack of a medical library, if he finds himself placed where one is inaccessible or totally inadequate, than many of you older men here tonight. They find themselves "cut off" or lost if they cannot consult a good collection of magazines and books. Not long ago a superintendent of a large hospital came to the New York Academy of Medicine seeking help for his small library, saying that its size was a distinct set-back to the internes who were graduates of important medical schools at which they had had the run of a good library.

Now, what does a good medical library consist of? This may be answered quickly under a few headings, but do not forget that it takes years to build up important collections.

1. A large number of current medical journals.
2. Complete back files of a large number of journals.
3. A large number of well-selected modern textbooks.
4. A large collection of public health documents and reports.
5. Old textbooks, texts illustrating the history of medicine, and histories of medicine.
6. Biographies and directories of medical men and scientists.
7. Bibliographies.
8. A collection of medical portraits and autograph letters.
9. Incunabula and other rare medical books.

10. Non-medical works written by doctors, that is, travels, novels, poetry, etc., and works of the laity which contain a good description of a doctor or of some aspect of medical life.

11. And last but not least, a good librarian—that you already have.

I trust that in what follows you will pardon my quoting figures of the Library of the New York Academy of Medicine so often.

I understand that you subscribe to, or at least put on your shelves, each year, about 200 medical magazines. To include a dozen more of the less expensive foreign journals about \$100.00 would be required. I think you should have many foreign magazines. The New York Academy of Medicine received 2,000 different medical and scientific journals last year. Odd numbers only of another 200 were received by donation.

To build up back files of a large number of medical journals takes a good deal of money, but of some of them it is not difficult at all to get gifts of long series of volumes. My friend, Dr. Wilburt C. Davison, Dean of the Medical School of Duke University, as well as the Northwestern University Medical School, have shown that it is not impossible to make a good collection at this late date. You might be interested to know that when we moved the Academy ten years ago, we discovered that we had separate numbers and volumes of at least 5,000 different medical magazines, living as well as dead. I have often thought that the infant mortality amongst these journals must be very high, for almost half of these 5,000, though we possessed a complete run, did not occupy more than one or two inches on the shelves. What do you suppose it was that the marasmic infants died of, circulatory failure? The greatest argument in favor of the Medical Library Association is that it carries on a very active exchange of material amongst the libraries. Thousands of magazines a year are being given away to other libraries to fill the gaps in their files, and the library which receives them is put to the expense of the express or freight only.

You buy or receive very few books a year. A few years ago we were looking into the possibility of our having branch libraries of the New York Academy of

Medicine and made a list of about 150 reference books dealing with the various subdivisions of medicine. These books would cost about \$1,500.00, and to replace some of them by new editions as these came out would probably cost \$300.00 a year more. The New York Academy of Medicine buys about 1,600 textbooks a year, but, of course, some of these are old ones, and altogether we add about 6,000 to 6,500 volumes annually to our collections. This number includes the bound volumes of our journals.

Many public health documents may be obtained free of charge, but to make a collection of them requires much correspondence. I do not know the number you get every year, but during 1935 the New York Academy of Medicine received about 1,000 annual reports and announcements from hospitals, health departments and medical schools, etc., and more than 100 documents, weekly, monthly or quarterly bulletins of health departments of the United States and foreign countries came in. Whilst we are speaking of documents, you should not throw away a single small leaflet of medical interest that was published or printed in the State of Michigan. It may be the only one in existence to tell the story of a short-lived medical school or society—in other words do not let a single chance escape you to build up your local history. A few years ago, Dr. Harvey Cushing wrote to me asking whether we had any literature about a defunct medical school, the College of Physicians and Surgeons of the Western District of New York, also called the "Fairfield Academy." I had heard of it merely from a casual remark by Col. Garrison in one of his papers. Imagine our surprise and delight when we discovered that we possessed about twenty catalogues or leaflets describing the courses, naming the members of the faculty, giving a list of the students and where they came from, and also stating the cost of board and lodging. Such witnesses from the past are very precious and probably very rare indeed.

I haven't the least doubt in the world that amongst your 38,000 volumes you already possess many old textbooks, valuable because they tell the theories and views of the past. In fact it is quite possible that your old books bulk more largely in your collections than they should. Some of these old books are important merely because they

relate the fantastic theories of a disease or its treatment; but there is no reason why you should throw such a book away. Who is there amongst us who is not interested in oddities? Strive to build up a good collection of histories of medicine, including those by Garrison, Osler, Daremberg, Haeser, Neuburger, Sudhoff, Withington, Singer, and Foster, to mention but a few. Perhaps you have these. You will find many of them easier reading than the old texts themselves. I think one is perfectly safe in saying that a man does not know his subject until he knows its history, that is, how it has developed. "Not to know what happened before thou wast born is forever to remain a child." Or as Hippocrates put it: "The physician must know what his predecessors have known, if he does not wish to deceive both himself and others."

For a proper understanding of what the medical profession has done through its members, and how these have lived and worked—men and women in practice or engaged in a life of investigation—and to learn the lessons of a life, you must have biographies. There is more education and inspiration to be derived from a reading of such biographies telling how these men struggled, and how they won, than anything else I know of. Besides, there is great enjoyment for you during any hours of leisure you may have. I am sure you possess some good lives of medical men but you should build up a much larger collection. I wonder where one could find a better biography than the life of Pasteur the scientist. At the New York Academy of Medicine we have almost 1,700.

I can scarcely speak too strongly of the benefit of a collection of good bibliographies. Medicine is highly favored in possessing finer ones than perhaps any other branch of knowledge and we owe this largely to the tireless efforts of Billings, Fletcher and Garrison at the Army Medical Library. The *Index Catalogue of the Surgeon General's Library*, which first appeared in 1880 and has just started on its fourth series—that is, it has already been through the alphabet three times—is an indispensable bibliographical tool. So are the *Index Medicus*, born in 1879, and the *Quarterly Cumulative Index Medicus* which began in 1927 when the *Index Medicus* was joined to the *Cumula-*

tive Index Medicus. There are other tools such as the various *Centralblätter* especially for the foreign literature and Albrecht von Haller's company of bibliographies, his *Bibliotheca Medicinæ*, *Bibliotheca Chirurgica*, and so on, published in the 1770's. He gave us more than mere lists of books and articles, for he tells something of the contents, even citing cases and adding thumbnail sketches of the lives of the authors. Then for the older works there is also Choulant's bibliography published in 1828, and the *Catalogues de la Bibliothèque Impériale*, *Catalogue des Sciences Médicales*, Paris, 1857 to 1889, of which the New York Academy is proud to possess a copy.

If you have not a good collection of portraits of medical men you should attempt to make one. I am sure you have some pictures of your local men, men who have served the citizens of this city, upholding, at the same time, the best traditions of the profession. They are worthy to be remembered. At the Academy for many years we have had portraits of New York doctors on our walls. For about a score of years we have also catalogued all the portraits of medical men that have appeared in all the journals and books we have received, giving us more than 50,000 cards. Besides, we have in vertical files over 8,000 mounted portraits all thoroughly catalogued whether they are merely photographs or halftone pictures or are fine examples of the engraver's art. A framed set of the colored caricatures of the medical men drawn by "Spy" makes a most amusing decoration for the walls of a room. Whilst speaking of portraits, let us not forget the pictures of hospitals and medical schools, beginning of course at home with illustrations of local institutions. These are of great historic value; for instance, in New York we found occasional reference in old letters or manuscripts to "the New York Medical Academy" but nothing definite was known about it—for the letters antedated the foundation of the New York Academy of Medicine, in 1847. We even thought the word "Academy" had been wrongly used for "Society." One day quite recently, however, a doctor who has often been very kind to our Library presented us with a little old line engraving of a small house, beneath which is printed, "the New York Medical Academy." What further proof

do we wish of its existence? There is much to be learnt of medical history from works of art such as Egyptian remains, Greek vases or friezes, and medieval or more modern paintings and carvings. Sudhoff and Singer have made excellent use of such material, even of illuminations of early manuscripts, and a whole body of literature has grown up about the subject. You should have the works of Holländer on medicine in caricature and satire, in classical paintings and in sculpture, but perhaps you possess them already.

Incunabula, or the cradle books of medicine, books printed before the year 1501, are of very special interest, but you should have some; for instance, the *De Medicina* of Celsus printed at Florence in 1478. There are some good collections of medical incunabula in this country and Canada; for instance, the large ones at the Army Medical Library, College of Physicians at Philadelphia, the Boston Medical Library, the Osler Library at McGill, and the New York Academy of Medicine. These are by no means the only medical books that may be called rare. I am glad to know that you have here the *De Humani Corporis Fabrica* of Vesalius printed at Basel in 1543. You should add to it the *De Motu Cordis* of Harvey, Frankfurt, 1628, and the much more rare work by Gaspar Aselli describing the lymphatics, *De Lactibus sive Lacteis Venis*, Milan, 1627, a work which the great Harvey could not bring himself to believe in and accept. I have mentioned but a very few, but should you not possess some of these rare books, do all you can to persuade private collectors in Detroit, who have them in their libraries, to place them on permanent loan in your Library. They, no doubt, will be proud to do so. There are many rare medical Americana which can be picked up occasionally. Probably you have Beaumont's *Experiments and Observations on the Gastric Juice and the Physiology of Digestion*, Plattsburg, 1833. We are extremely proud of having almost twenty of the rarest medical Americana, namely the inoculation tracts printed at Boston between 1720 and 1730.

Now I come to a collection of books which have interested us very much—the non-medical works of medical men. You will be surprised what interest has been expressed in our collection of novels and

poetry by medical men or at least by men who went so far on the "physic line" as to become medical students: Eugene Sue, Keats, Smollett, Charles Lever, Goldsmith, Weir Mitchell, Oliver Wendell Holmes, Conan Doyle and a host of others including writers of today such as Warwick Deeping, Francis Brett Young, and Somerset Maugham. Books of travel written by medical men are not only important in such a collection because they are written by doctors, but because, whenever a physician's pen runs over his paper he cannot help but give many medical details, such as types of illness and epidemics he has seen; he records many strange customs he has met with in foreign parts. These all add to our knowledge of medical history. We owe to Sir Raymond Crawford the happy distinction made between the "medicine of history" and the "history of medicine." His own book on *The Last Days of Charles II* illustrates the point, as do many memoirs, for they may be full of the "medicine of history." The book *Letters of the Empress Frederick*, recently published, gives many details of the case of her husband; his illness has now become famous and doctors of more than one nation have written of it. Then much has been written by Cabanès and others about the illness of such famous persons as Napoleon and medical men still argue over it at medical society meetings.

As a side issue, we have made a point of placing together in one room our biographies of medical men and scientists, novels, and poetry by medical men, the "medicated novels" by the laity, as Oliver Wendell Holmes called them, literary essays, religious books, anecdotes of doctors and satires upon them, hospital sermons, and books written by doctors about their hobbies, golf, archery, fishing, hunting, and many other pastimes. I take great pride in showing one book written by a retired doctor of London named Shepard Taylor, though he wrote under the name "Æsculapius Junior," who had a most curious way of passing his time—he drew the iron covers of all the coal holes he tread upon in his walks through London streets and wrote a book entitled *Opercula (London Coal Plates), Sketched by Æsculapius Junior*—I can almost hear him chuckling over the Latin! All these books we have on open shelves in our Fellows' Room and I can

tell you, from observation of those left out on the tables, that this room is much appreciated. I do believe it is not simply because that is the only smoking room in our Library that it has been so popular! Why not try it here?

In ancient days, Rome, a city of chariots, possessed a medical library. Detroit today is the city *par excellence* of modern chariots but alas it has not a medical library worthy of it and worthy of the capable men who carry on the arduous practice of medicine here. The answer to the question of what you should do about building up a fine medical library is this: you must, every one of you, have the firm conviction that you should possess such a library and that it will be for your good—for the good of Detroit medicine—and for the good of your patients to have one. The rest of the answer is that you must go out and get the money for endowment, but there is nothing sadder than to see funds raised only to find out that they are not really wanted by those for whom they have been collected. I should be in a false position here were I to advise you to seek an ample endowment unless I felt not only that a few enthusiastic lovers of books wished to have a good library but also that it was the earnest desire of every member of the Wayne County Medical Society. I am not familiar with the conditions here in Detroit but I do ask you all to put your shoulders to the wheel and you will succeed. I do not know whether there are differences of opinion here in Detroit or not, but if there are, all the parties concerned, who wish to build up a good library, should sink their differences, place their cards on the table, and, by give and take, a satisfactory compromise can be arrived at. The late Dr. William S. Thayer once wrote: "A well balanced life is one long compromise. We must compromise as best we can with existing conditions while we seek to direct events towards that which we think the wisest course." You cannot afford here to attempt any more than one large medical library but by arrangement between them of lending from one library to another and reading privileges for all in both or several libraries, duplication of subscriptions and in the purchase of books can be avoided.

Now, how are you to get the endowment? I think it is quite obvious that much, but

not all, can come from members of the Detroit medical profession, and, of course, I include the dentists, for the dental library should be part and parcel of the main medical collection. This year you have assessed each member of your Society 50 cents for the Library, but as you well know the total will be only about \$750.00, which is, after all, a pittance. You must go to your well-to-do patients—and surely you have plenty in this rich city—and say that you doctors

desire to improve yourselves, and tell them that indirectly they will benefit greatly. The members of your Woman's Auxiliary will be glad to do all they can, I am sure.

I close with the wish and hope that you will all work hard towards this end for then your efforts will be crowned with success and you will obtain a medical library worthy of the Wayne County Medical Society and the medical profession of Detroit.

MEDICAL LIBRARIES

WILFRID T. DEMPSTER, Sc.D.
ANN ARBOR, MICHIGAN

MOST of the knowledge of modern times is available in libraries. If it had been possible to preserve equally complete information from the past, human progress might have been easier and more rapid. Records of ancient libraries, however, are very meager, and what is known of them comes to us from the studies of archeology and the often inconsistent and contradictory comments of ancient writers. Libraries are known from the civilizations of Egypt, Assyria and Greece, though few details are available. The first places in which collections of books were deposited seem to have been the temples and palaces. Books were scarce and expensive, hence such protected locations might not be unexpected. As early as the fourteenth century B. C., Ozymandias, King of Egypt, is said to have established a library which was destroyed during the Persian invasion under Cambyses.

During the excavation of the palace of Assur-bani-pal, King of Nineveh, several rooms were discovered which contained baked clay tablets covered with cuneiform. The library rooms were located at some distance from the more private parts of the palace and thus may have been so isolated for the use of scholars. A special functionary was in charge of the tablets, which were arranged in a series and provided with a general catalogue.

In early Greece, the private library seems to have been an important institution. Extensive libraries were collected in the sixth century B.C. by Polycrates of Samos and Pisistratus of Athens. Private libraries must also have existed during the Golden Age of Athens. A collection of medical books is said to have been developed at Cnidus. Aristotle had an extensive collection of books which passed to his pupil, Theophrastus, and from him to Neleus. This collection is thought to have influenced the founding of the famous Alexandrian

Library, and it is possible that some of the actual books may have formed part of this collection.

Of two famous libraries at Alexandria, the first appears to have been founded by Ptolemy Philadelphus (285-247 B.C.). The libraries were called the Serapeum and the Bruchaeum. During Caesar's conquest of Egypt, the Bruchaeum was largely destroyed by fire. Mark Antony presented the library of Pergamum to Cleopatra, and the Serapeum, thus augmented, became the principal library. Great collections of papyri were stored in these libraries, and books were listed under one hundred twenty classes. Seneca stated that the Alexandrian Library was a pompous spectacle, rather than a place for study. The Bruchaeum was again destroyed in part under Aurelian (273 A.D.), and the Serapeum under Theodosius about 389-391 A.D. It is also probable that the libraries suffered further at the hands of fanatical Christians. After the conquest of Alexandria by the Saracens in 638 A.D., nothing more was heard of the libraries.

A rival library at Pergamum was established by Eumenes II (197-159 B.C.), and the Greek geographer, Crates of Mallos, was for a time its head. Modern excavations of the temple and library of Perga-

mum showed apertures in the walls which were doubtless designed for the insertion of bookshelves. Because of the Egyptian monopoly on papyrus and the difficulty of obtaining it for the Pergamum Library, parchment came into use as a suitable substitute. During the latter days of the Republic, the library passed into the hands of the Romans, under whom it was finally dismantled.

The first Roman library seems to have been one taken by conquest from Macedonia by Æmilius Paulus in 167 B.C. Later extensive private libraries were maintained by Cicero, Terence, Lucullus and others.

Julius Cæsar foresaw the value of public libraries to Rome, and he commissioned Marcus Terrentius Varro to organize and manage such a library, but Cæsar's sudden death disrupted plans and it was not until Augustus that the idea was consummated under C. Asinius Pollio, who inaugurated the first Roman public library, the Atrium Libertatis. Two other libraries were founded during the period of Augustus, and other libraries followed, so that in the fourth century of the Empire twenty-eight or twenty-nine public libraries existed in Rome with still others in the provinces. The names and locations of only seven of these libraries are definitely known to us. Characteristically, the libraries were located near or in association with temples. They were lavishly decorated with statues and works of art, and simple, convenient and well-defined methods were used in storing rolls and documents.

Books consisted of lengthy rolls of papyrus, sometimes thirty feet long, bound writings on parchment or papyrus and small treatises, memoranda and official records. Each roll appears to have been a unit of the library, regardless of size. For convenience in storage, Roman books were placed in *capsæ*, cylindrical containers with removable tops designed to hold one or more rolls standing upright. A similar receptacle, known as the *scrinium*, was used as a temporary holder for a number of rolls. Rolls were likewise stored horizontally on shelves in a cupboard called an *armarium*. Reading desks were part of the furniture. An index of the contents of a library was available, and each roll was tagged with a title. In addition to an administrator,

libraries were also provided with clerical assistants or copyists.

The Roman library contained both Latin and Greek texts, which were stored separately. History, politics, drama, oratory, archives and poetry were the more important subjects. Books of a scientific character occupied a minor position. In addition to being used for reading and reference, the libraries seem to have served as meeting places for literary men.

Books were undoubtedly abundant both in Rome and in Constantinople. Constantine the Great founded a library about 330 A.D. as partial reparation to the Christians for injuries suffered during the reign of his predecessor. This had a small beginning, but was enlarged by Emperors Julian and Theodosius.

After the fall of the Roman Empire, most existing libraries were destroyed by the invading barbarians. A few outstanding men, such as Tonantius Ferreolus, Publius Consentius, Cassiodorus, King of the Goths, and Charlemagne, established libraries, either private or for the use of monks. Charlemagne also founded a library in Jerusalem for the benefit of pilgrims. The chief places where books were preserved, however, were in the monasteries.

The library era of the Christian world may truly be said to have begun with the publication of the Rules of St. Benedict early in the sixth century, for although Christian libraries had existed since the third century, this was the first definite description. St. Benedict's Rules prescribed the setting aside of definite hours for uninterrupted reading. Subsequent orders added to his directions: the Cluniacs appointed a special officer to take charge of the books with an annual audit of them and the assignment of a single volume to each brother; the Carthusians and the Cistercians provided for the loan of books to outsiders under certain conditions. By the end of the eleventh century, Benedictine Houses possessed two sets of books: those distributed among the brotherhood and those stored for reference.

It is rather unusual to note that there was no definite room provided for the storage of books in the monasteries until the fourteenth and fifteenth centuries. Up to that time, books were kept in the cloister where the brothers also studied regardless of the weather. The books were stored in wooden

presses or *armaria* after the Roman custom. Later the windows of the walks of the cloister were glazed, while some of the monasteries provided the elder monks with small wooden studies called "carrells." Many modern libraries still provide carrells for students. As the number of books increased, they were stored in presses in any spare room that could be found in the monastery. Eventually, it became necessary to construct a special room for the storage of books, and these libraries were not infrequently thrown open to scholars upon the receipt of sufficient indenture. Many of the books in the monastic libraries were chained for safe keeping. The chained books were first placed on a single shelf above a reading desk, but, since this method involved a great waste of space, two or three shelves were added and additional books were chained to a rod by a sliding ring so that many more books were available at one desk. Books were also laid on shelves below the desk. This was especially true in the case of books with elaborate bindings and bosses at the corners.

The religious and literary books of European libraries were augmented by volumes on a greater range of subject matter which came from the Arabian countries. Medical works, mathematics and alchemy, as well as older classical works, were most important to the development of subsequent European scholarship. Arabian libraries existed at Baghdad, Cordova, Cairo and Tripoli. Under the western Caliphate, over seventy libraries are estimated to have been in existence in Andalusia.

With the establishment of relations between European civilization and that of the Arabians during and subsequent to the Crusades, it is significant that books were the principal medium of intellectual contact. In Spain, Sicily and Italy, men were engaged in translating Arabian manuscripts, and their work, when copied, became a valuable increment to European libraries. Europeans at this time abstracted these foreign works or added commentaries. The changing character of libraries together with an increasing academic interest shown in the spread of the university idea resulted in the dissemination of scholasticism. Scholasticism was a bookish creed and the library was its temple.

Books before the era of printing were

duplicated by hand by professional or monastic copyists or by students who transcribed books for their own use. The use of paper as a substitute for parchment made books somewhat cheaper and resulted in the discarding of papyrus. With the increasing importance of books in the scholastic movement, private libraries became common, and library lists of fifty to a hundred volumes which are descriptive of private libraries of scholars of the Middle Ages are known to us.

Libraries likewise became the backbone of the newly formed universities of the thirteenth, fourteenth and fifteenth centuries. Collegiate libraries were modeled in many respects after the monastic, for, of course, many colleges were founded by churchmen. In 1268, a library was established at Baliol and was soon followed by libraries in the other colleges of Oxford. At Cambridge, libraries appeared at Peterhouse in 1284-5, at Clare in 1346, and at Gonville and Caius in 1348. The Cambridge Library proper came into existence before 1444. Richard de Fournival made a catalogue, "Biblionomia," of his own 300 books, and this collection was bequeathed to a college founded in 1257 by Robert de Sorbonne, thus creating the first public library in Paris.

Other libraries were scattered throughout Europe. The greatest library in Italy was the Vatican Library of Rome. The Biblioteca Estensia of Modena was founded in 1393, and under Cosimo de Medici, the Venetian Library appeared in 1433. Another library was established in Florence by Niccolo di Niccoli in 1436. About 1367, the Bibliothèque Nationale was founded at Paris. The Imperial Public Library of Vienna was established in 1440, and the Library of St. Mark at Venice in 1468. Medical books were probably available at this time in collections at such hospitals as St. Bartholomew and St. Thomas and at the universities.

The invention of printing with movable type during the decade before 1450 had a tremendous influence on libraries. It allowed books to be duplicated without text variation, greatly increased the annual output of books and made them cheaper. The custom of chaining books in monasteries and universities accordingly began to drop out of practice though, in some places,

books were chained as late as the eighteenth century.

The size of books was definitely influenced by printing, since books were printed on paper sheets whose size was determined by the molds of the paper maker. Due to the manner of folding paper by the printer, volumes appeared in such standard sizes as folio, quarto, octavo and duodecimo. Thus book material came to have certain uniform sizes which allowed the storage problems of libraries to be defined.

A new system of arranging bookcases had come into use on the continent in the Escorial designed by Herrera in 1584. These cases were set against the walls instead of at right angles to them as in the earlier libraries. Christopher Wren in 1695 when he built the Trinity College Library was the first English architect to use this system, making the windows high in the walls, instead of low, and thus leaving space for books beneath the windows. He also had bookcases jutting out from the walls to provide recesses for the students and additional space for the storage of books. There was no evidence of chaining in this library.

Due to the Humanist viewpoint which attained importance a half century after the appearance of printed books, both scholars and printers became dissatisfied with many of the texts which were the center of scholastic activity. Texts of ancient authors in original Greek or Arabian came to supplement Latin translations, thus introducing lingual problems into the library.

During the sixteenth and seventeenth centuries, one phase of the Humanist movement developed into scientific investigation. In many cases, the universities which might have been expected to be leaders in intellectual emancipation were most reactionary. The real leaders of the intellectual movement were usually independent scholars or those with loose academic affiliation. Correspondence between scholars living in different regions became important and likewise local groups met to talk on scholarly problems. Academies, such as the *Accademia del Cimento* of Florence, the Royal Society of London, the French Academy of Science and the Berlin Academy, had their beginnings in the mid-seventeenth century. In Germany, the *Collegium Naturæ Curiosorum* and the *Collegium Curiosum Sivi*

Experimentale, which were chiefly devoted to medical matters, came into existence. These societies, shortly after their inauguration, published journals or transactions, which, together with later journals of literary character, brought to the library a series of publications of uniform format which gave the library a distinctly modern character. It also demanded a new approach to the cataloguing of the contents of periodicals. The academies and societies usually established libraries shortly after their period of founding. The French Academy of Science held its early meetings in the Royal Library. The library of the Royal Society was established in 1662 and the Royal College of Physicians of Edinburgh in 1681.

Simultaneously, numerous general libraries which later acquired importance were established throughout Europe during the sixteenth and seventeenth centuries. The eighteenth century was characterized by the establishment of numerous public libraries, and it was during this period that many very extensive private libraries flourished. As examples of the spread of libraries through Europe, the following may be listed: Aix en Provence (1705), Turin (1720), Bordeaux (1738), British Museum of London (1753), Sorbonne at Paris (1762), Royal Irish Academy at Dublin (1765), Milan (1770), Parma (1779), Royal Society of Edinburgh (1790), Lisbon (1796), the Hague (1798). The University of Göttingen (1736-7) was said to be the best administered library of the eighteenth century. The Imperial Public Library of St. Petersburg first consisted of books seized by Czar Peter in 1714. This library was opened to the public in 1747 and due to numerous accretions, including the Zaluski Library of Poland, came to have over two million volumes at the time of the Russian Revolution.

Numerous large private collections were in existence. William Hunter's medical library consisted of seven thousand volumes, and the libraries of Anthony Askew and Richard Mead brought over four thousand and five thousand pounds respectively when sold. The extensive libraries of John Radcliffe and of Sir Hans Sloane formed important additions to Oxford University and the British Museum.

A feature of medical and biological im-

portance in the library was the bibliography of Conrad Gesner and of Albrecht Haller. Gesner's catalogue of books which essayed to cover volumes of a biological and medical nature appeared in 1545. This remained the most important series till the eighteenth century when Haller prepared his series of bibliographic volumes in botany, anatomy and surgery, and medicine. During the nineteenth century, bibliographies were made by Young, Haeser, Ploucquet, Forbes, Atkinson and Watts. Certain journals, such as *Schmidt's Jahrbuch*, likewise contained references or abstracts. The most extensive attempt of the early nineteenth century, however, was an ambitious, indexed author catalogue by the Danish surgeon, Carl Peter Callisen. The thirty-three volumes of his *Medicinisches Schriftsteller-Lexicon* appeared between 1830 and 1845 containing as a noteworthy feature extensive indices of the contents of periodicals. Somewhat later in America was begun by John Shaw Billings the most extensive index catalogue of medical and biological literature in the world.

In the British Isles, important collections of medical literature were found at the Library of the Royal College of Physicians of Ireland (1713), in the Royal Medical Society of Edinburgh (1737), in the London Hospital Medical College (1740), in the Manchester Royal Infirmary (1752), in Heriot's Hospital at Edinburgh (1762), in the Medical Society of London (1773), in the Royal College of Surgeons of Ireland (1784), in the Medical Society of Plymouth (1794) and in the Royal College of Surgeons in London (1800). The latter collection increased to 60,000 volumes by the World War period. The Royal Society of Medicine in London increased to 80,000 volumes at this time. The Library of the British Museum, which became the largest and most important in the British Empire, contained many medical works.

French medical libraries were established at the Société de Médecin of Lyons (1789), at the Société de Médecin of Paris (1796) and at the Société de Médecin et Chirurgie of Bordeaux (1789). The Library of the Paris Medical Faculty in 1914 contained 210,000 volumes and was the largest medical library in the world. This library was begun in 1733 when the Faculté acquired

2,273 volumes from the bequest of François Picoté de Bélestre.

The second largest European collection of medical books was that of the Imperial Medico-Military College of St. Petersburg, which contained 180,000 volumes by the time its name was changed to the Library of the Lenin Imperial Medico-Military Academy. German libraries were smaller than the larger libraries of the countries named, but, due to a system of central cataloguing of all German public libraries in Berlin and in eleven provincial centers, a tremendous volume of books was available to students. In 1914, 167 medical libraries were in existence in different European centers, and many medical books were to be found in general libraries.

The development of libraries in the United States, and particularly of medical libraries, has been a phenomenal achievement of American enterprise. The first libraries of the American colonies were private libraries of such men as William Brewster, Governor Winthrop of New England and Col. Ralph Wormeley of Virginia. Many of the libraries were private libraries of ministers or were small collections associated with parishes. The library of Rev. John Harvard in 1638 became the nucleus of the Harvard College Library. The first public library seems to have been proposed by Rev. John Sharp in 1712-13. Benjamin Franklin, after an unsuccessful attempt at pooling the library facilities of his friends, proposed a subscription library in 1731, and this later became the Philadelphia Library Society. Book-sellers in Boston, New York and other places frequently maintained lending libraries, a small charge being made for the use of books. The principle of state libraries supported by public taxation developed during the later eighteenth century, but public libraries did not become common until 1850. The Library of Congress was established in 1800, but remained insignificant for a half century, finally, however, developing an extensive collection and a card catalogue system which came into widespread use throughout the country. In 1853, the first library convention was held at New York, and, at this time, few libraries were free in the sense that is common at present. The Boston Public Library was one of the most important of the free libraries of this period.

After the Civil War, the library movement gained headway. In 1800 there were 102 libraries in the United States available to the public, and in 1876 there were 3,650, most of which had had their development since the middle of the century. Women librarians, after the Civil War, became increasingly common. A number of private libraries were turned over to the public through gift and bequest and many benefactors endowed local libraries. Carnegie began his library philanthropy in 1881. With the increment in libraries, the importance of library classification became obvious. Melville Dewey, the Father of the American Library Association and librarian of the New York State Library, developed a system of classification based on numbers and decimals. The Library of Congress developed an alternate system involving both letters and numerals and in addition published catalogue cards of all its accessions. Duplicates of these cards were available to all libraries at a nominal cost.

The first medical library in the United States was established in Philadelphia in colonial days. In 1751, the Pennsylvania Hospital was founded and twelve years later a library was established, funds being provided from the fees paid by students and from donations. Benjamin Franklin was one of the library founders. This library was not only the oldest medical library in the United States, but for a hundred years, the largest. From less than 100 books, the library increased to 528 volumes in 1790, to 7,300 in 1837, to 10,000 in the 1850's and 15,000 in 1898. During Civil War days, this library was surpassed by the Library of the College of Physicians of Philadelphia which was founded in 1788. Other early medical libraries were those of the New York Hospital, the Medical Department of the University of Pennsylvania, the Harvard Medical School, the Medical Society of South Carolina and the Medical Department of Dartmouth College.

Since the eighteenth century, medical libraries increased from about a half dozen to 167 in 1923. Most medical libraries in the United States had modest beginnings. Members of a medical society would collect funds so that several current publications might be subscribed to; a medical college would gather publications for its students and faculty; or a hospital would furnish

books for the use of its staff. In this way, libraries were established at the Medical Society of the District of Columbia (1819), at the Cincinnati Hospital (1820), at Worcester District Medical Society (1822) and at the New York Academy of Medicine (1847). Medical libraries likewise appeared at the Medical School of Maine (1820), at the Medical College of Georgia (1835), at the University of Buffalo (1845) and at the Western Reserve Medical College (1850). Medical departments were also added to existing libraries at the Academy of Natural Sciences of Philadelphia, at the University of Virginia, at the University of Louisville, at Tulane, and at the University of Wisconsin. The common method of financing libraries was the collection of dues from the society members or from college students. Endowments were rare, though the nucleus of many libraries was a private library.

The most notable figure in the history of American medical libraries was John Shaw Billings, who after experience as a surgeon during the Civil War became associated with the Surgeon General's Office. A library of about a thousand volumes was located in the office and Billings undertook to improve it. A slush fund of \$80,000 became available after the war, and with it he purchased books and periodicals bringing the library to a high level of efficiency. The library was designed chiefly as a working library rather than as a repository of old books. Extensive collections of periodicals thus formed the basis for the library. Due to financial backing and wise administration, no medical library has increased so rapidly. The need of a catalogue soon became apparent, and, in 1872, Billings began to index articles in periodicals as well as books. In 1876, a *Specimen Fasciculus of a Catalogue of a National Library* was published and the extent and importance of the Surgeon General's Library was made obvious. Both subjects and authors were listed in the same alphabetical sequence and this same system was used after 1880 when Billings, assisted by Robert Fletcher, published the first volume of the *Catalogue of the Library of the Surgeon General's Office*. This has continued in many volumes to the present. The first volume of the fourth series dealing chiefly with subjects listed under the letter "A" was just published in

1936. Billings and Fletcher also initiated the *Index Medicus*, a monthly catalogue of current publications. The *Quarterly Cumulative Index Medicus* published by the American Medical Association was another bibliographic undertaking of similar scope which eventually took over the function of the preceding index.

Thus, under Billings, not only was a library for consultation established at Washington, but a check list of references was made available for students at various libraries throughout the country. The early development of medical bibliography and the phenomenal growth of the Surgeon General's Library had an important influence on American medical libraries. This was particularly evident after 1895 when the first series of the catalogue was completed.

Free public libraries of a general type subscribed to medical publications; hospital staffs, groups of doctors or societies assessed members so that journals could be purchased; and colleges levied library fees on students and faculty. Till the end of the nineteenth century, it was a controversial problem as to whether the medical department of the general library was as effective as the medical library proper. In the 1890's, in Denver, a catalogue was made of the private libraries of all physicians and, with this union catalogue as a directory, private libraries supplemented those of the local libraries.

Private collections in increasing numbers were turned over to medical libraries. The Nicholas Senn Collection went to the Newberry Library of Chicago, the Pagel Collection to the Library of Washington University, St. Louis, the Howard A. Kelly Collection to Johns Hopkins Hospital and the Gross, Lewis and Weir Mitchell Collections to the Library of the College of Physicians of Philadelphia. A number of libraries, such as those of the New York Academy of Medicine, the University of Pennsylvania, the College of Physicians of Philadelphia, the Cleveland Library Association, the John Crerar Library and the Quine Library of Chicago and the Treadwell Library of Boston, acquired endowments.

The movement for the spread and development of medical libraries received organized backing with the founding of a medical library association of the United States and Canada, in 1898, under the presidency of

George M. Gould. The work of the association facilitated meetings of librarians, the exchange of duplicate books between libraries and the securing of endowments and private collections for libraries. The work was advanced through publications of the association: *Medical Libraries* (1898-1902), *Bulletin of the Association of Medical Libraries* (1902), *Medical Library and Historical Journal* (1903-1907), and the *Bulletin of the Medical Library Association* (since 1911). Such names as Gould, Spivak, Osler, Brownne, Browning, Chadwick, Dock and Ruhrah were prominent in the activities of the association.

Developments of the twentieth century of importance to medical libraries involved, in addition to increase in numbers of volumes of individual libraries, methods of correlating the material of various libraries. A practice of loaning books by mail developed and in 1917 a set of rules for inter-library loan was formulated by the American Library Association. By the payment of postage, smaller libraries were able to procure temporary use of any but the rarest volumes of the larger libraries, thus bringing their efficiency up to that of the best libraries in the country. The importance of this service is indicated by the number of requests for books received by several large libraries. The Crerar Library had 184 requests in 1911 and 2,406 in 1931; the University of Illinois, 124 in 1914, and 1,427 in 1923; the University of California, 756 in 1923, and 2,307 in 1932; and the Library of Congress, 1,023 in 1909 and 20,000 in 1926.

A great union catalogue of periodicals prepared by the American Library Association gives the names, numbers of volumes, dates and locations of the various periodicals in libraries throughout the country, thus facilitating the loaning system. The use of the photostat has allowed rare books to be duplicated for other libraries and some administrators have preferred photostat service to inter-library loan as being less damaging to books. Both inter-library loan and photostat service are expensive, and more economical methods have been sought. Since 1930, the photographing of book pages on strips of motion picture film has allowed reproduction of books at a very small cost per page. Bibliofilm reproduction, as the method is called, promises to be a prominent method of extending library facilities in the

future. The Société des Éditiones sur Films des Bibliothèques Nationales de France has, for several years, been reproducing rare books on film, beginning at a rate of twenty thousand pages per year. Such American libraries as the Congressional, Harvard and the University of Chicago, have installed apparatus for taking pictures. Under Dr. R. H. Draeger of the United States Naval Medical School, and Dr. A. Seidel of the National Institute of Health, a bibliofilm service has been inaugurated at the United States Department of Agriculture, 300,000 pages being reproduced at the end of the first year, 1935. Since June 1, 1936, Science Service has taken over and operated the

service at a cost of about a cent a page. An extension of bibliofilm to the Surgeon General's Library and the New York Academy of Medicine has been urged. The problem of the library thus shall be shortly expanded to include the storage and distribution of film books and articles.

Only one important advance lies ahead of the American library, some arrangement where books other than periodicals can be so catalogued that the location of any book in the country can be determined quickly for loan purposes or copying. A start has been made in this direction in some libraries where special card catalogues refer to books in neighboring or national libraries.

Low Basal Metabolic Rate and Use of Desiccated Thyroid

That the thyroid gland plays only a small part, if any, in the production of a low basal metabolic rate in conditions other than myxedema, John M. Berkman, Rochester, Minn. (*Journal A. M. A.*, June 13, 1936), believes is suggested by the fact that, in the treatment of myxedematous patients with desiccated thyroid, very obvious conditions both physical and otherwise are completely eradicated by such treatment, whereas, in the treatment of nonmyxedematous patients with low metabolic rates, desiccated thyroid is often required in much larger doses to maintain a normal basal metabolic rate, but it does not bring about any apparent physical change. Any classification of conditions associated with a low metabolic rate must take these facts into consideration, and a workable classification must ignore many highly important but unknown factors. The author gives the following classification, which he believes satisfactorily separates conditions associated with a low rate of metabolism: 1. Myxedema is a definite clinical entity associated with positive physical signs, including nonpitting edema, and a basal metabolic rate with any physical characteristics. The low basal metabolic rate without myxedema (a large group of cases that includes several subgroups) may be classified in accordance with various physiologic disturbances which are not of necessity associated with any physical characteristics. The low basal metabolic rate may be a familial characteristic and it is often associated with asthenia. A low basal metabolic rate without myxedema may be associated with menstrual disturbances, sterility or hypersecretory rhinitis. 3. In anorexia nervosa the lowered basal metabolic rate is associated with a combination of psychic disturbances and diminished intake of food. It may or may not affect individuals whose basal metabolic rate was previously within normal limits. 4. Hypopituitarism is a definite clinical entity associated with characteristic physical signs but without edema, regardless of the basal metabolic rate. There are two distinct indications for the use of desiccated thyroid in which its value has been definitely shown: (1) as a specific in the treatment of myxedema and

(2) as a method of elevating a low basal metabolic rate to normal in the absence of myxedema for the purpose of improving the general condition of the patient. In general it would appear that, either through lack of familiarity with the use of desiccated thyroid or with the conditions under which its use is indicated, the full effect of this substance has in many instances not been obtained. The action of desiccated thyroid is slow, and therefore to some extent cumulative; also, following the ingestion of desiccated thyroid a considerable period elapses before the effect of the drug has entirely disappeared. For clinical purposes one should wait a month before attempting to determine an individual's metabolic rate following the use of desiccated thyroid. As a general rule one does not expect favorable results from elevation of the metabolic rate unless that rate is in the region of —16 per cent or lower and when such a rate is associated with definite symptoms, the most significant of which are fatigue and intolerance to cold. As a routine, in the absence of nephritis and cardiac vascular disease, an initial dose of 12 grains (0.8 Gm.) over a period of three or four days may be used. At the end of that time a metabolic determination is made. When the original metabolic rate was considerably lower than —20 per cent, it may be found that after an interval of a few days a second course of 12 grains over a period of three or four days may be required to bring the metabolic rate above —10 per cent. At times, especially in the presence of severe associated conditions such as chronic nephritis, coronary sclerosis and severe hypertension, extreme caution should be used in administering desiccated thyroid, small doses such as 1 or 1½ grains being used from the beginning of the treatment. In determining the maintenance dosage, metabolic determinations should be made at the end of a period of two months. As a rule the time consumed in elevating the metabolic rate and in determining the individual dosage of desiccated thyroid is from three to four weeks. It has been the author's custom to use desiccated thyroid prepared by one company, as there is considerable variation in the potency of preparations put out by different companies.

President's Page

DESIGN FOR THE GENERAL PRACTITIONER

IT has been some years since the Michigan State Medical Society has had a general practitioner as its president. I feel I know some of the problems of the general practitioners throughout this state, having been one of them in the northern part of Michigan for thirty-five years. And I am still in active practice, still going out at night to take care of the obstetrical case, still hitting the road in all types of weather. Every call is still answered by this family doctor!

But I am disturbed about one matter: the general practitioners in some county medical societies seem inclined to sit back and with their innate modesty elect others to the official positions of the organization. They delegate the work and problems of the general practitioner to those who are limiting their work! Then some few criticize this condition of things, and decry their own position in the background, while others ask the question: "What are our county and state medical societies doing for us?"

I need the advice and help of more general practitioners, because after all, most of the medical problems of this state are those of the men doing general work. The specialists seem to be solving the important problems facing them—by closer unity. To accomplish the same desirable result, the general practitioner must become active—very active, in his county medical society. Only through a strong county medical society—yes, fifty-four of them, covering all the eighty-three counties in this State—can the Michigan State Medical Society be of maximum service to you and all other practitioners.

I appeal to all general practitioners to become more interested in the aims, and active in the work of their county medical society. I ask them to attend their monthly meetings, and to elect *workers* as officers of their county medical society. Workers are required during this transitional age. I urge that they take advantage of the postgraduate conferences sponsored by the Michigan State Medical Society and the University. I invite them to come to the next Annual Meeting of the Michigan State Medical Society to be held in Grand Rapids, September 27-28-29-30, 1937. I suggest that they utilize the services of the executive offices of the State Society in Lansing.

As one general practitioner to another, will you tell me your problems and give me your suggestions for their solution? I pledge that I shall make every effort to improve medical practice in the State of Michigan. However, it can be done only with your help. Are you willing to labor with me during 1937 for the common good?

The New Year offers bright opportunities for great accomplishment. My season's wish is that, with unity of purpose and sustained hard work by all for the next three hundred sixty-five days, each practitioner will gain a satisfaction from his medical work beyond his brightest hopes.



President of the Michigan
State Medical Society

THE JOURNAL

OF THE

Michigan State Medical Society

PUBLICATION COMMITTEE

A. S. BRUNK, M.D., Chairman.....Detroit
 HOWARD H. CUMMINGS, M.D.....Ann Arbor
 ROY H. HOLMES, M.D.....Muskegon
 VERNON MOORE, M.D.....Grand Rapids

Editor

J. H. DEMPSTER, M.A., M.D.
 5761 Stanton Avenue, Detroit, Michigan

Secretary and Business Manager of The Journal
 L. FERNALD FOSTER, M.D.
 Bay City, Michigan

Executive Secretary

WM. J. BURNS, LL.B.
 2642 University Avenue, St. Paul, Minnesota
 or
 2020 Olds Tower, Lansing, Michigan

DECEMBER, 1936

*"Every man owes some of his time to the up-
 building of the profession to which he belongs."*

—THEODORE ROOSEVELT.

EDITORIAL

FRACTURES

THE subject of fractures is becoming yearly more important to the general practitioner as well as to the surgeon and orthopedist. The general practitioner is usually first to be consulted and a great many of them go no farther since they get satisfactory treatment by physicians in general practice. While the subject of fractures is very large, there are certain phases of it, and one in particular, growth and repair of bone, that can be explained with comparative brevity. It is universally accepted that all fractures or suspected injuries to the bone should be examined by means of the x-rays for diagnostic and therapeutic purposes. This is by far the best method ever devised for the examination of bone abnormalities, whether due to injury or disease.

The question of callus formation is one that presents itself to every physician when he undertakes the responsibility of reducing and splinting a broken bone. Fractures should be examined before reduction, if possible, but every case should be followed by x-ray after reduction in order to record the position of the fragments when adjusted as near as possible to their normal relations. Whenever bone is broken, hemorrhage takes place at the site of the broken ends. This

hemorrhage is from the injured vessels of the periosteum and within the medullary canal as well as from the vessels of the tissues surrounding the broken bone. This hemorrhage should not be disturbed more than is necessary, for soon after the accident small vessels begin to form from the periosteum and endosteum, and in the extravasated blood lime salts are eventually deposited, which forms callus in the process of repair. A mere crack in the bone will not produce callus during the repair period. The more jagged the broken ends, the more abundant will be the callus. An excess amount of callus is deposited, which, when repair is complete, will undergo resorption, so that after a year or more the anatomical and functional result will be much better than predicted at the time of the injury. This is in accord with Wolff's law, namely, that internal and external configuration of the bone is adapted to the function it performs. Callus is more abundant in broken bones of children and young adults, less so as age advances. There is no definite time for the formation of callus. It appears sooner in children and young persons and is delayed as age advances beyond the prime of life. In some multiple fractures, owing to the heavy demand for lime salts, it may not appear at all.

Whether syphilis interferes with the repair of bone is a moot question. The role of the periosteum in bone repair has also been debated. Some maintain that it is the source of bone regeneration; others, that it is simply a protective covering of the bone without further function. It is very important, however, that the periosteum be conserved, if satisfactory repair is to take place.

X-ray examination through a cast is not satisfactory for the determination of callus, owing to the fact that the cast itself is made of mineral salts. Sometimes there may be an abundance of callus and yet only a fibrous union, a pseudo-arthrosis; sometimes a very small amount of callus and clinically a fairly good union.

In treating fractures, one should never lose sight of the fact that there is not only a broken bone to be cared for, but the surrounding tissues as well. Any force sufficient to break a bone will cause injury to the surrounding tissues. Any force sufficient to

break a bone will cause injury to the surrounding soft tissues which will not appear in the x-ray film. Even a force sufficient to cause a very slight fracture will damage such structures as lymphatics, blood vessels, nerves, muscle fibers and sometimes fascia and skin. Satisfactory repair of the bone, as well as the injured soft tissues, demands that the circulation be re-established and favored.

MEDICINE: WHAT DOES IT MEAN?

OPPONENTS of the Basic Science Bill are endeavoring to have medicine identified solely with drug therapy. They are attempting to propagandize people at large, including also the elected representatives, with the idea that the Basic Science Bill is a measure to give the advocates of drug therapy a monopoly in the healing arts, eventually, if not now.

Nothing could be further from the truth. Medicine has always carried with it a broader significance than treatment by means of drugs. Etymologically, medicine is derived from the Latin *mederi*, to heal. It is allied with the Greek *medos*, meaning care. Medicine, therefore, even in its early significance, meant the healing of disease or care of the sick. It still carries the same meaning, extended, of recent years, of course, to include prevention of disease.

The term *medicus* means physician in the broadest sense. The methods legitimately employed in medicine in the way of prevention of disease or treatment are limited only by their rationality and efficacy in the alleviation or prevention of human suffering. Drug therapy is only one of the available weapons against disease. Preventive medicine employs no drugs for personal administration. It even makes use of contributions from engineering, sanitation, together with immunization in its various forms. Some of the medical specialties, such as surgery or roentgenology, do not use drugs at all. Then there is physical therapy with its many methods and devices of treating the sick. These together with diet and rest are legitimate agents in medicine. In this day and age, it is impossible to identify regular medicine with any one method, such as drug therapy.

BOOKS

This number of the JOURNAL contains two contributions on kindred, almost identical subjects. Why a Medical Library, by Dr. Archibald Malloch, librarian of the New York Academy of Medicine, was the subject of the address before the Wayne County Medical Society on November 2. While this address deals intimately with the medical department of the Detroit Public Library, which is in reality the Wayne County Medical Library, it contains many recommendations and suggestions for medical libraries in general. The second paper, by Dr. Wilfrid T. Dempster, on Medical Libraries, goes into more or less detail regarding the history of medical libraries or collections of medical books in a large way. These two papers can be considered together very advantageously.

Medicine is intimately connected with books inasmuch as they contain a record of the best knowledge of the past. Ruskin once said, "The best part of a man is his book." Milton, in his famous *Areopagitica*, put forth a powerful plea for freedom of speech. However, he had in mind the protection of books, rather than periodicals.

He wrote, "I deny not but that it is of the greatest concernment in the church and commonwealth to have a vigilant eye how books demean themselves as well as men, and thereafter to confine, imprison and do sharpest justice on them as malefactors. For books are not absolutely dead things, but do contain the potency of life in them to be as active as that soul was whose progeny they are; nay, they do preserve as in a vial the purest efficacy and extraction of that living intellect that bred them, or yet, on the other hand, unless wariness be used, as good almost kill a man as kill a good book; who kills a man kills a reasonable creature, God's image; but he who destroys a good book kills reason itself, kills the image of God as it were in the eye. Many a man lives a burden to the earth; but a good book is the precious life blood of a Master Spirit embalmed and treasured upon purpose to a life beyond life."

Sir William Osler was a great lover of books and a consistent user of libraries. He one time said: "To study the phenomena of disease without books is to sail an uncharted sea, while to study books without patients is not to go to sea at all."

There are two broad classes of books for the physician, namely, those pertaining to his immediate work and those a little more remote dealing with the history of his calling as well as works written by members of his profession on non-medical subjects.

THE BASIC SCIENCE BILL

ONE of the best arguments that we have heard for the passage of the proposed Basic Science Bill was advanced before the House of Delegates by Dr. Howard H. Cummings at the last annual meeting of the Michigan State Medical Society. Dr. Cummings was chairman of the Legislative Committee during the drafting of this bill. In presenting the report of the legislative committee, Dr. Cummings delivered himself in *ex tempore* fashion. Even though his address appeared in the stenotype report of the deliberations of the House of Delegates published in the November number of this JOURNAL, it will bear repeating. Dr. Cummings said:

"Your Committee studied the basic science laws as passed in ten other progressive states, namely Wisconsin, Connecticut, Minnesota, Nebraska, Washington, Arkansas, Arizona, Oregon, Iowa and the District of Columbia. One state had a law which almost seemed to fit our situation here in Michigan, and from this state law our sub-committee drew heavily, changing necessary sections to fit the local situation. The proposed basic science bill represents almost the Minnesota law with some alterations. I want to give Minnesota credit for this, but I might say that all of these states have drawn, one from the other, in order to draft a basic science law.

"Now just what is a basic science bill, and what are the objects? Why do we need a basic science law? The Act is "An Act to define and to regulate the practice of healing, to define the term 'basic sciences,' and provide for the appointment, powers and duties of a Board of Examiners in the basic sciences; for the punishment of offenders against the Act, and to repeal all acts and parts of acts in conflict therewith."

* * *

"The purpose of the basic science law is to protect the public. It isn't necessary to say to this group of physicians that the laity does not discriminate. When they hear the term "doctor" it doesn't mean literary preparation, four years of medical work, internship and all that. They do not know about that. They think of a man who knows all about sickness, who can diagnose their disease and help them. The basic science law aims to help protect these people so that, feeling that way, they see a sign "Dr. So-and-So," and they must contact a man, or will contact a man who has had some training, which, in our bill, corresponds to two years of literary work. That is a good background for a medical training, and it is about the minimum standard. It means that this man, regardless of what he practices, in anything that he practices he has had a training; an adequate training in anatomy, because how can he treat a sick person if he knows nothing about the structure of the machine he treats? Physiology—the normal functions of the body—basic. He must know these things: Anatomy and Physiology. He should know something about disease reactions in the body, pathology, otherwise he would not know diseases or what he was treating. He must know the causes of disease, many diseases—bacteriology: this is not unreasonable. If

he is to protect the people of the State of Michigan he must know public health and hygiene. If he is to carry on treatment, if he is to know anything about the diagnosis of disease by various laboratory methods, etc., he must know chemistry. Surely that is the minimum we could ask from anyone who cared to treat the sick or who was inspired to treat the sick.

* * *

"With this fundamental training and this knowledge in the six basic science subjects, a man would be fairly well prepared to pursue further study in any healing art. There is nothing discriminatory about this bill. It is not retroactive. It affects no man practicing any form of healing today in this state. We couldn't pass such a bill. It does not aim to weed out the cults. It puts us on an equal footing with ten other states, so that Michigan will not be the dumping grounds of all men and women who care to practice the healing art regardless of their qualifications. That is the way it is going to operate. In a few years the states that are without a basic science law will have dumped in upon them thousands and thousands of individuals who, without adequate training, desire to treat the sick. We must protect the public. We are asking nothing of these people that we do not ask of our own medical students. They will have to pass a Basic Science Board. This Board is made up of six Examiners. These Examiners are not practicing physicians, but they are outstanding men teaching the various subjects, such as physiology, anatomy, chemistry, public health, and pathology. These men will meet and examine every candidate who wants to practice healing in the State of Michigan.

"The bill is far from complete. I have briefly given you the synopsis of it. We are not asking something to protect the doctor. I feel sorry for the doctor who feels he must be protected from the cultist. Any doctor who keeps up to date, who has had a good training, need never fear a cultist. It is ridiculous. We are not here to fight the cultists; we are here to protect the public and to raise the standard of those who care to treat the sick—the educational standards. These are the only purposes of the basic science law. It is not to help the practitioner of medicine as we know it. Those of you who have not a copy of the basic science bill will soon have it. I want to ask you to study it because it isn't complete and it isn't perfect. We want the suggestions of every doctor in the State Society. We are going to need your help. The machinery has been set up to pass this bill, but it is going to require more than the work of the state officers, of the committeemen. It is going to require work from every County Society."

TAKING THE "X"
OUT OF X-RAY

The "x" in x-ray was put there because the ray was an unknown quantity, and even now, when we think we know pretty much all about it, its dangers are directly due to what the people who handle it don't know. The layman who tries to make x-ray examinations may be a good technician, but he is not a medical man, and is not qualified to interpret the pictures he takes. Equally, too, the doctor who owns an x-ray machine may have the highest medical skill, but may lack a thorough knowledge of his apparatus, unwittingly injure his patient, and let himself in for a heavy damage suit. So there are still several "x's" in this mysterious ray.

An interesting article from the Special Committee of Radiology, in *The New York Medical Week*, says that "the Committee feels that roentgenology is a form of medical practice," and goes on:

The layman does not have the adequate training necessary to do this type of practice safely and efficiently. X-ray diagnosis involves far more than photography. A thorough knowledge of pathology and manifestation of disease is essential. Only a medical training can give this. The physician who refers his x-ray cases to laymen bears a heavy responsibility to the profession at large, the future efficiency of the radiologist and, above all, the welfare of the patient.

The Committee is also of the opinion that those physicians who use x-ray apparatus should have sufficient knowledge to operate and keep such machines in a manner to insure the maximum safety to the patient. There are undoubtedly many installations now in operation which are potentially dangerous but could be corrected by minor adjustments.

The harmful effects of inefficient x-ray work divide themselves into two general groups, diagnosis and therapy. In diagnosis, there is always the danger of severe electrical shock or death in open installations, that is, where the high-tension wires are exposed. The installing of shock-proof equipment will, of course, considerably reduce this danger but not entirely eliminate it. There is also the possibility of giving an overdose of x-ray with the production of an x-ray dermatitis. An x-ray dermatitis in diagnostic work almost invariably results in a heavy lawsuit. The dangers of unskilled application of therapeutic x-rays are even greater. Serious and permanent damage and even death may result from unskilled therapy. This is well illustrated in the terrible disfiguring end-results of epilation by x-ray as carried out in certain beauty parlors. The resulting after-effects are not only disfiguring but a particularly vicious form of carcinoma is apt to occur at the site of the dermatitis.

The Editor of *The New York Medical Week* reinforces this report with a thoughtful editorial, remarking:

Patients requiring radiological service run a more than average risk unless they fall into expert, conscientious hands. Poor equipment adds to the dangers of mediocre or insufficient training. The good craftsman in every field employs fine tools and keeps them in order. So the qualified specialist in roentgenology almost always has the best machines, with maximum safety devices. In commercial laboratories run by lay technicians, on the other hand, cheap installations are common, inspection infrequent. The operators either do not know or are indifferent to the dangers to which faulty apparatus subjects the patient.

If radiology consisted solely of photography there would be some excuse for the independently practicing technician. Accurate x-ray diagnosis demands a thorough understanding of pathology and its radiographic manifestations, however—knowledge that is supplied only by medical training.

The possession of a doctor's degree does not qualify a physician to practice radiology without further preparation. In addition to his general medical education he must understand the nature and effects of the roentgen ray and the structure (with its attendant hazards) of the x-ray apparatus. Over and above all this there must be skill in the operation of the machine, ability to interpret fine details on the plate and judgment in the application of therapeutic dosage. If the average physician is not ready to engage in radiology without special training, how much less so is the lay technician.

The slightly lesser costs of lay service do not compensate for the risks run or the uncertainty of diagnoses made by technicians without professional training. The public does not realize this, however, and the cut rates advertised by many commercial laboratories are a source of destructive competition to the competent specialists who are seeking to advance the science and practice of radiology at the same time that they must earn a living. Practitioners who have occasion to employ x-ray aids to diagnosis or treatment should bear professional standards as well as price in mind and confine their patronage to qualified medical radiologists.—From *New York State Medical Journal*.

SOCIAL SECURITY AND MEDICINE

DR. E. A. MEYERDING (Minneapolis): I came here to learn. There are two places that I go to learn about State organizations, one being Wisconsin and the other Michigan, and I have learned a lot this morning. I must congratulate you on the wonderful showing you have here today. You have one of the best exhibit halls that I have seen anywhere. I think your state meeting now ranks among the very first in this country. There are few states that have a meeting such as you have here.

I was very much interested in what was being said this morning. A few weeks ago I was at Madison, Wisconsin, and listened to their House of Delegates. Our problems and the problems of practically every state in this country today are the same. I think you will agree with that.

You spoke about medical relief. That was discussed in Wisconsin and we spend considerable time on it in our state in the Council. Some states seem to have a better method of solving it than others, though it depends upon the local situation. There is one thing certain: the more you get into it the more you wonder where the medical profession is going to wind up.

Not long ago somebody was telling a story about a trip to a convention city that illustrates this uncertainty. As they approached this town they saw a sign, "Where are you going?" A little later on they saw another sign, "You are going to hell." Still further on they found another sign, "Welcome! Chamber of Commerce." (Laughter)

Where we are going under this New Deal I don't know. I do know that things are going on that you don't know and that I don't know about, though whether the New Deal is responsible is hard to say.

As I left on Sunday I found a memorandum on my desk that Mr. Foster, the man who debated Fishbein at Purdue, was at Carleton College for six weeks and that he was going to speak throughout the state. Why? He is undoubtedly going to talk on state health insurance. Why is he there? Who sends him, or who pays him? I haven't found out yet.

An accurate survey of all phases of medical practice would be of great value to all of us. In certain states, such as Wisconsin, the governor has appointed a commission to investigate medical costs. If the state medical organization is able to anticipate this investigation, so much the better for us. We

*Dr. Meyerding, secretary of the Minnesota State Medical Association, was guest at the meeting of the House of Delegates of the Michigan State Medical Society at Detroit on September 22. This address was presented before the House of Delegates and is here published, as it gives the experience of a neighboring state regarding the matters in which we have a common interest.

have in our state a committee of the Planning Board to investigate Minnesota's social security situation. Two doctors are on this board and medical costs will be investigated. Perhaps between an investigation by our state medical association and their investigation we may be able to bring in a report which will be of benefit to the public and will provide the basis for a satisfactory system of medical care.

For several years we have adhered to one principle. We have been fighting for it in all phases of medical relief and the Social Security program, and that is the "free choice of physician." We believe, if we can maintain it, that the other things will more or less solve themselves.

We work by counties. We do not have a state coordinator, although I have an assistant whose job it is to contact the various agencies, federal and others, engaged in welfare work.

We find so many different agencies. Our man's job is to keep contact, and we have found, to our surprise, that these people are not hard to deal with. He has done a splendid job, and in fact the official of whom we were very much afraid two years ago today is advocating choice of physician.

We have an interim commission also that is supposed to study the welfare program in our state. I believe "welfare program" is the best term of all. There are a variety of plans for handling it, of course, anywhere from state appointed boards to county appointed boards. I feel pretty confident that in our state the counties will fight for their local rights.

I noticed some motions were made this morning. I think we should perhaps be cautious about taking action because changes come so fast these days. Just the other day we found that still another state agency in Minnesota was engaged in formulating a plan and performing the same function as the interim commission. So you have the situation changing constantly. We should be very sure of our ground before we move.

I want again to express to you my appreciation for the privilege of being here. I know that I am going back with a lot of important information. I thank you. (Applause)

Christmas

Oh! It's Christmas time that's comin', ah am thinkin'
o' th' ndo,
An' th' glory o' th' singin' o' th' carols that we'll do,
An th' smilin' bairnie faces as they're lichted oop
wi' glee,
It's a time that's aw'fu' precious an' significant tae
me.

There's a somethin' 'boot th' Christmas that digs
deep intil th' soul,
Doon deep intil th' conscience where oor morals
seem tae roll,
An' its touchin' tae th' hert strings as we live oor
lives alang.
This birthday o' a Christmas; it's a day for gift an'
sang.

Let us then mak mair o' Christmas, for th' joy it
brings tae a',
For th' boundless love it brought us, frae beginnings
verra sma',
For th' hope an' cheer an' courage, for oor friend-
ships near an' far,
An' th' cross that leads tae Heaven, an' th' bricht
an' shinin' star.

WEELUM.

Colonic Cancer

Curtice Rosser, Dallas, Texas (*Journal A. M. A.*, Jan. 11, 1936), analyzed 100 unselected and consecutive cases of cancer of the colon received in the services of various members of the surgical staff of a 500-bed general hospital. Comparison with statistics on 1,564 cases compiled by six observers indicates that there is a very definite location incidence of colonic tumors, more than one-half being found in the descending colon and sigmoid, one-fourth in the cecum and ascending colon and approximately one-fifth in the midcolon. When the symptoms that had been observed by the patients were tabulated and compared with those reported in other series, a striking and universal similarity was found to exist. Cancer of the cecum and ascending colon apparently simulates, in more than two-thirds of the cases, chronic appendicitis, except for the absence of fever and the presence of weakness due to moderate (27 per cent) or severe (38 per cent) anemia. In 22 per cent of the patients the preoperative diagnosis was appendicitis. Twenty-three of the present series were operated on, eight having had one-stage resections. The mortality was 52 per cent. In one-half of the surgical deaths the preoperative diagnosis was incorrect or indefinite. Constipation, manifested by necessity for laxatives or by intestinal colic relieved by a bowel movement or passage of flatus, is a feature in those cases presenting growth in the mid-colon. Blood was observed in the stool by 19 per cent of the patients, and diarrhea was the predominant feature in a similar percentage. Anemia was almost as constant as in tumors of the right colon. Twelve patients were operated on; eight had one-stage resections; four died following operation; in two of these the preliminary diagnosis was incorrect or indefinite. Cancer of the descending colon and sigmoid apparently makes itself apparent in from one-half to two-thirds of the patients by constipation and colic; about one-fourth have continuous diarrhea. In cases subjected to surgery the diagnosis was incorrect or indefinite in three-fourths of the 22 per cent which ended fatally following operation. Rectosigmoid cancer presents an accentuation of the symptoms seen in other parts of the left colon, with a sharp rise in the number of patients observing blood in the stool and a paradoxical decrease in the degree of anemia. The preoperative diagnosis was correct in this group; the mortality was 25 per cent. When the data obtained for the various locations are compared an upward transition is noted from right to left in four features: average duration of symptoms, constipation and colic diarrhea, and macroscopic bleeding. The following symptoms are highest in incidence on the right and decrease as the rectum is approached: anemia, indigestion, localized pain not relieved by bowel movements, and palpable tumor. Constipation, colic and obstruction are the predominant features of colonic cancer in general, occurring in from 40 to 50 per cent of the cases; diarrhea is noted in a substantial number by all observers.

Conservative Treatment for Habitual Dislocations of Shoulder

Arthur G. Davis, Erie, Pa. (*Journal A. M. A.*, Sept. 26, 1936), states that (1) the treatment outlined has eliminated the necessity of operative measures in 75 per cent of a consecutive series of typical recurrent dislocations; (2) the patient is only somewhat disabled during a short period of treatment, and (3) the evidence submitted suggests that this short period of treatment yields results of a permanent kind and therefore offers an alternative to operative approach.



The following is the first of a series of brief articles on the business side of a physician's practice. They will offer pithy suggestions and aids to enable the doctor to master, with more ease, a phase of his daily work which is often distasteful but always necessary.

GOOD OFFICE RECORDS MAKE MONEY

ALLISON E. SKAGGS and HENRY C. BLACK

IN GENERAL, doctors with the best office records have the best collections. Just as the case record is important in obtaining a good therapeutic result, so is the financial record important in obtaining a good financial result. For instance, the tabulations of a recent questionnaire sent to Michigan doctors showed that those with adequate office records were collecting 15 per cent more than average. In other words, a doctor with inefficient office records taking in \$7,000 a year should be able to increase his income \$100.00 a month by improving his financial records.

How can you tell whether your methods are adequate? The detailed routine to be followed depends upon the type of practice, the community, and your personal requirements, but if you can answer the following questions readily, your records are very likely serving their purpose:

1. How much work did you do last month?
2. How much cash did you receive and where did it go?
3. What was your collection percentage?
4. How many of your patients received statements?
5. How much were your office expenses?
6. How much do you owe and to whom?
7. How much do you own and where is it invested?

Only by good financial records can you *know* your own business, and only by knowing these and other answers can you determine what course to follow in collections, purchases, investments, and other business matters.

Good records are the heart of your business.

Traumatic Neurosis and Prompt Settlement of

Claims: There is little or no therapeutic benefit in cash settlements paid to injured workmen who have traumatic neuroses, according to an investigation made recently by Carl Norcross, Ph.D., of the Rehabilitation Division of the New York State Department of Education. Results of the investigation have been published under the title "Vocational Rehabilitation and Workmen's Compensation" and the report is a follow-up study of 322 workmen's compensation cases throughout New York which were closed by a lump-sum settlement of \$1,000 or more.

It has been generally accepted in both medical and workmen's compensation circles throughout the country, says the report, that a cash award would help to cure a neurosis. "A careful investigation made a year or more after the settlements has convinced us that the value of a cash award is vastly overrated," writes the author. "It is the settlement of the case, the actual ending of the litigation, which is of value. Whether the final compensation award is paid in one lump or extended through a number of installments makes little difference to the claimant's condition."

The investigation disclosed that 16 per cent of the men had lost a large share of their compensation through unwise expenditures. The men who had no losses were found to have dissipated their

funds much more rapidly than they would have under an installment system. Both because there was found to be a wastage of compensation funds, and because there appeared to be no therapy in the settlements, the author has recommended that lump-sum settlements be discontinued.

Dr. Norcross makes a number of recommendations for improving the handling of neurotic cases in the workmen's compensation rooms. He urges that cases be given a more prompt and careful handling. The average neurotic case is open in the workmen's compensation division for nearly three and one-half years, it is said, and much of the delay is unnecessary.

The author states that neurotic conditions grow as cases are delayed. He also points out the dangerous policy of permitting claimants to read their own medical reports, or to be present when physicians are testifying, especially in contested cases where there is a difference of opinion.

In New York a compensation case theoretically may always be reopened. The report suggests that it is a poor policy to let neurotic claimants know that when their money is spent that they may try to reopen their cases. The author believes that one of the evils of the existing New York system in non-schedule cases is that claimants must be willing to accept a lump-sum settlement. After a fair offer is made, the neurotic claimant may procrastinate indefinitely by refusing such a settlement. Thus the case is delayed, and the patient's mental condition may become worse. The remedy suggested by the report is that the referee, acting on competent medical advice, fix a fair settlement and close the case, with the award being paid in bi-weekly installments.

To overcome any prejudice the claimant may have toward the insurance company, it is suggested that the money be paid to a State administered trust fund, which already exists in New York. The carrier should close the case on its books, and the claimant could be told his case is definitely closed but that he would get all his money, regardless of his state of health. The patient would not have to remain sick to get his award.

Provision is made for permitting the claimant to get an advance on his compensation for any necessary purpose, including rehabilitating himself on a farm or in a small business.

Copies of the report may be secured through the publisher, The Rehabilitation Clinic, 28 East 21st Street, New York City. Price One Dollar.

Injuries of Hand: Clinical Lecture At Kansas City Session

Sumner L. Koch, Chicago (*Journal A. M. A.*, Sept. 26, 1936), states that the arrest of hemorrhage, the treatment of shock, and the careful examination of the hand—not the wound—are the first steps in the care of an injured hand. The principles involved in the further treatment, as in the treatment of any compound injury, are care not to add injury to that which has already taken place, careful excision of hopelessly injured tissue, the use of a minimum amount of foreign material in the repair of the injured structures, closure of the open wound as soon as it can be done with safety, and rest until healing has taken place.

DEPARTMENT OF SOCIETY ACTIVITY

L. FERNALD FOSTER, M.D., Secretary

Council Chairman's

- - - Communication

Make the System Work

THE late Will Rogers used to say that all he knew was what he read in the newspapers. Only this morning, for example, I read the following in the editorial columns of one of our Michigan dailies:

"Lack of public interest and participation is at the foundation of most of our political failures. Almost any system will work well enough if the people insist on making the system work."

Another pertinent statement gleaned from the same perusal of the morning's news was as follows:

"Money counts in a campaign but local organization counts even more. Our local must be better organized, must have more party workers."

Transmit the above thoughts to the realm of Medicine, and we see how aptly they apply to the situation confronting our practitioners at the present moment. Lack of interest on the part of some of our physicians regarding the activities in Lansing and Washington which affect their individual practice of medicine is the basis for the success of our aggressors. Poorly organized county medical societies with apathetic memberships is the reason our opponents are successful in foisting selfish schemes on a gullible public.

We must have well-organized, active and aggressive county medical societies if we are to have a productive state society. More workers back home spells success for the state-wide efforts of the Michigan State Medical Society.

To give one specific example, the county medical society must become legislative-conscious. The chairman of its legislative committee should be elected because of his fitness for the job. This official should be given a two or three year term. He should train a younger man so that when his time comes to go up in the ranks, his legislative work will go on without pause. He should

be a key-man with the local legislators, along with the family physician.

More complete participation in the plans and efforts of your county medical society will bring benefits to the State Society, to the county unit, and to each practitioner in his daily work. In the interest of yourself and the patients you serve, will you become a worker in your medical society, especially during the incoming legislative year?

P. R. URMSTON, M.D., Chairman,
The Council, Michigan State
Medical Society.

PAR: 54

WE MUST have well-organized, active and aggressive county medical societies if we are to have a productive state society. More workers back home spells success in the state-wide efforts of the Michigan State Medical Society." These words from the Council Chairman's Communication deserve repetition. They mean that all the work of the State Society, with its Council, its seventeen committees, and its enthusiastic members and workers is to no avail unless the fifty-four component county units, covering all of the eighty-three counties of the state, are composed of a maximum membership, are supremely active and alert, and are working in unity and coöperation.

Great social changes today make it imperative for all physicians to know what is going on and to take proper action at the right time. We have the leadership. What we need are enthusiastic laborers in every community, workers striving to bring each county medical society up to a par of strength and unity so that the whole profession of the state through its component parts, acts as ONE in matters pertaining to the good of Medicine.

Help bring your County Medical Society up to par!

PUBLIC HEALTH EDUCATION INTEGRATED THROUGH THE PUBLIC RELATIONS COMMITTEE

AT A RECENT meeting with the Subcommittee on Adult Health Education, the Public Relations Committee of the Michigan State Medical Society was called upon to integrate the Public Health Activities of the Joint Committee.

It is recognized that health programs should originate with and be directed by the organized medical profession. There are many existent health agencies whose contacts and coöperation can lend great assistance to the publicizing of health education programs.

The collaborating agencies of the Joint Committee on Public Health Education have offered the services of their organizations to the Michigan State Medical Society in furthering constructive health education.

In any health program in a community, two important procedures are necessary; first, information on the specific program to the physicians of the community, and secondly, education of the lay public.

The first completed health program originating in a committee of the Michigan State Medical Society is the Cancer Program. This is now being integrated throughout the County Medical Societies of the state and will be followed by an active Adult Health Education publicity through the directing forces of the Michigan State Medical Society and proffered coöperative efforts of the Joint Committee. This specific program will be followed by those from the other committees of the State Society.

Integration of health programs through the Public Relations Committee and the actively collaborating agencies of the Joint Committee will give Michigan programs of excellently coördinated health education.

BETTER OBSTETRICS IN MICHIGAN

PHYSICIANS who do obstetrical work in the State of Michigan will soon receive some study blanks which are being distributed with the idea of ascertaining and evaluating the character of the obstetrical service which is being rendered at the present time.

The success of the study will depend upon the conscientious manner in which these blanks are answered by individual physicians. The Committee feels that, inasmuch as approximately 40,000 blanks will be sent out, the data collected from this study will constitute a vast storehouse of information which will be of inestimable value for study and reference, and which will, undoubtedly, stimulate members of the profession to elevate the standards of service rendered to expectant mothers.

The Committee very earnestly urges each physician to do his bit by filling out these blanks as soon as they are received.

The information gathered will be for statistical purposes only and no publicity will be given to any individual's report.

Let us all coöperate heartily in this work and help to achieve a most worthy accomplishment, namely, *Better Obstetrics in Michigan*.

COUNTY SECRETARIES CONFERENCE

Wednesday, September 23, 1936

THE special conference of county secretaries held at the time of the Annual Meeting of the Michigan State Medical Society, at the Book-Cadillac Hotel, Detroit, gathered a representative group of officers of the state and county medical societies.

Chairman L. Fernald Foster of Bay City called upon Dr. Philip A. Riley of Jackson, who spoke on "How to Stimulate County Society Activities"; Dr. Henry A. Luce of Detroit presented "The Golden Opportunities of Preventive Medicine Procedures"; Wm. J. Burns, Executive Secretary of the State Society, talked of the "Crying Need for Better Physician-Public Contact"; and Dr. Fred B. Burke of Detroit mentioned the progress being made with the problems of unauthorized practice of medicine.

The four capsule chats were followed by the address of the evening, "What Does the 1937 Legislature Hold for You as a Practitioner of Medicine?" presented by Dr. Howard H. Cummings of Ann Arbor.

This Secretaries Conference was noteworthy for its snappy, informative addresses, and the enthusiasm of those who attended. As one Secretary from a northern county expressed it: "In one hour at

the Secretaries Conference I learned more about my own problems and those of the medical profession as a whole than during the past twelve months while busy practicing medicine."

The Annual Secretaries Conference will be held in Lansing shortly after January 1, 1937. The program is now being arranged by Chairman Foster.

Among those attending the special Secretaries Conference in Detroit were:

Dr. Grover C. Penberthy, President, M. S. M. S. (1935-36), Detroit; Dr. Henry Cook, President-elect, M. S. M. S. (1936-37), Flint; Dr. A. M. Hume, Past President, M. S. M. S., Owosso; Dr. George M. Kesl, Secretary-Treasurer, St. Clair County; Dr. H. L. Sigler, Secretary-Treasurer, Livingston County; Dr. Saba Kessler, Secretary-Treasurer Medical Women's National Association, Michigan Branch, Bay County; Dr. Florence Ames, Secretary, Monroe County; Dr. Elsi T. Morden, Secretary, Lewanee County; Dr. J. J. McCann, Secretary, Ionia-Montcalm Counties; Dr. E. F. Sladek, Secretary, Grand Traverse-Leelanaw-Benzie Counties; Dr. W. E. Ward, Secretary, Shiawassee County; Dr. T. Y. Ho, Secretary, Clinton County; Dr. E. G. McGavran, Secretary, Hillsdale County; Dr. C. G. Clippert, Secretary, O. M. C. O. R. O. County; Dr. C. G. Burke, Secretary, Oakland County; Dr. A. T. Rehn, Secretary, Luce County; Dr. C. E. Umphrey, Secretary, Wayne County; Dr. Lloyd L. Savage, Secretary, Tuscola County; Dr. C. W. Colwell, Secretary, Genesee County; Dr. B. J. Graham, Secretary, Gratiot-Isabella-Clare Counties; Dr. F. M. Doyle, Secretary, Kalamazoo-Van Buren Counties; Dr. G. B. Saltonstall, Secretary, Northern Michigan County; Dr. M. B. Beckett, Secretary, Allegan County; Dr. Shattuck W. Hartwell, Acting Secretary, Muskegon County; Dr. Wilfrid Haughey, Secretary, Calhoun County; Dr. F. B. Burke, President-elect, Wayne County Medical Society; Dr. C. R. Dengler, President, Jackson County Medical Society; Dr. H. A. Luce, Past President, Wayne County Medical Society; Dr. T. K. Gruber, President, Wayne County Medical Society; Dr. J. E. Ludwick, Public Relations Committee, Jackson County; Dr. L. J. Johnson, Public Relations Committee, Washtenaw County; Dr. W. H. Alexander, Public Relations Committee, Dickinson-

Iron County; Dr. L. G. Christian, Legislative Committee, M. S. M. S., Ingham County; Dr. L. J. Gariepy, Legislative Committee, M. S. M. S., Wayne County; Dr. A. V. Wenger, Delegate Member, P. R. C., Kent County; Dr. A. G. Sheets, Delegate, Eaton County; Dr. G. C. Stewart, Delegate and Past President, Houghton-Baraga-Keweenaw Counties; Dr. F. B. Miner, P. R. C. Member, M. S. M. S., Genesee County; Dr. C. C. Slemmons, Commissioner, Michigan State Board of Health, Lansing; Mr. Harold G. Webster, Director, Social Research, Michigan Association of Personal Finance Companies, Detroit; Dr. C. S. Tarter, Bay City; Mr. John A. MacLellan, Executive Secretary, Michigan Conference of Social Work, Lansing; Mrs. A. V. Wenger, President, Woman's Auxiliary, M. S. M. S., Kent County; Mrs. A. M. Giddings, Past President, Woman's Auxiliary, Calhoun County; Dr. G. M. Byington, W. K. Kellogg Foundation, Battle Creek; Dr. Henry Vaughan, Commissioner of Health, Detroit; Dr. Bertha L. Selmon, President, Michigan Branch, Medical Women's Association, Battle Creek; Mr. J. A. Bechtel, Executive Secretary, Wayne County Medical Society; Mr. Harry R. Lipson, Assistant Secretary, Wayne County Medical Society; Mr. Lynn Leet, Assistant to Executive Secretary, M. S. M. S., Lansing; Mr. L. C. Salter, *Detroit Free Press*.

COUNCIL AND COMMITTEE MEETINGS:

1. **November 10, 1936**—Legislative Committees, Olds Hotel, Lansing, 4:00 p. m.
2. **November 11, 1936**—Executive Committee of The Council, Olds Hotel, Lansing, 3:00 p. m.
3. **November 13, 1936**—Mental Hygiene Committee, Eloise Hospital, Eloise, Michigan, 12:30 p. m.
4. **November 15, 1936**—Maternal Health Committee, Olds Hotel, Lansing, 10:00 a. m.
5. **November 23, 1936**—Special Committee on Revision of Fee Schedules A, B, C, D, Auditor General's Office, Lansing, 3:00 p. m.
6. **November 29, 1936**—Preventive Medicine Committee, Grayling, 12:30 p. m.
7. **December 6, 1936**—Public Relations Committee, Olds Hotel, Lansing, 3:30 p. m.
8. **December 9, 1936**—Economics Committee, Wayne County Medical Society Building, Detroit, 1:00 p. m.
9. **December 9, 1936**—Executive Committee of The Council, Wayne County Medical Society building, Detroit, 3:00 p. m.

MEETINGS OF THE EXECUTIVE COMMITTEE OF THE COUNCIL

THE October and November meetings of the Executive Committee of The Council resulted in several important decisions and the transaction of much business. The highlights of these sessions included: Decision to hold next Annual Meeting of the Michigan State Medical Society in Grand Rapids, September 27-28-29-30, 1937; election of Dr. I. W. Greene, Owosso, as a member of the Executive Committee; appointment of Dr. Wilfrid Haughey, Battle Creek, as Councilor of the Third District; announcement of new committees of The Council; approval of the principles of the proposed Basic Science Bill; slight increase in the advertising rates of The Journal; authorizing appointment of special committee to develop a model constitution and by-laws for county medical societies; authorizing publication of a legislative booklet; decision to publish a Directory of Members of the Michigan State Medical Society in the May, 1937, issue of The Journal; approval of a panel discussion Michigan's Problem of Economic Insecurity, as It Relates to Medicine.

The minutes of the two meetings of the Executive Committee of The Council follow:

OCTOBER MEETING

October 7, 1936

1. *Roll Call.*—The meeting was called to order by Dr. P. R. Urmston, Chairman, at 2:55 p. m. in the Statler Hotel, Detroit. Those present were Dr. Urmston of Bay City, Dr. A. S. Brunk and Dr. H. R. Carstens of Detroit; and Dr. T. F. Heavenrich of Port Huron. Also present Councilor I. W. Greene of Owosso, President H. E. Perry of Newberry, President-Elect Henry Cook of Flint; Secretary L. Fernald Foster of Bay City; Editor James H. Dempster, Detroit; Past-Secretary C. T. Ekelund of Pontiac; Dr. Wm. J. Stapleton, Jr., Detroit, Secretary of the Medico-Legal Committee, and Executive Secretary Wm. J. Burns. Absent Dr. J. E. McIntyre of Lansing, and Dr. F. E. Reeder, Flint.

2. *Minutes.*—The minutes of The Council meeting of September 23 were read, corrected and approved.

3. *Dr. Greene Made a Member of Executive Committee.*—The President spoke of the advantage of adding Dr. I. W. Greene to the Executive Committee of The Council. Motion of Drs. Brunk-Heavenrich that in view of Dr. Greene's experience and fitness, he be invited to sit in with the Executive Committee of The Council and be accorded the same consideration as any other member of the Executive Committee. Carried unanimously. Thereupon Chairman Urmston announced that Dr. Greene is a member of the Executive Committee of The Council, with power to vote.

4. *Auditor's Report.*—The report of Ernst & Ernst on the condition of the MSMS books from January 1 to September 30, 1936, was presented to the Executive Committee, and given study. Motion of Drs. Heavenrich-Brunk that the auditor's report be accepted. Carried unanimously. Bills payable for September were presented and on motion of Drs. Carstens-Heavenrich were ordered paid. Carried unanimously. The expenses of the 1936 Annual Meeting were referred to the Chairman of the Finance Committee, Secretary Foster, and the Executive Secretary for analysis.

5. *Proposed Basic Science Bill.*—This proposal was studied, and motion of Drs. Brunk-Carstens that the draft of the Basic Science Bill as presented be approved with minor exceptions as noted was carried unanimously. It was suggested to the Legislative Committee that the bill be submitted to the AMA for suggestions; that copies be forwarded to the WCMS et al for general dissemination, same to be marked "preliminary draft of proposed basic science bill."

6. *Transfer to New Secretary.*—Dr. Ekelund was presented with a copy of the Auditor's report on the

condition of the books to September 30, 1936, and he turned over to Secretary Foster the certificates of deposit of the MSMS. The Executive Committee recognized this as the official transfer of the records and office of the Secretary from Dr. Ekelund to Dr. Foster, as of this date. The fidelity bond on Secretary Foster is to take effect as of this date.

Motion of Drs. Carstens-Heavenrich that, the audit having been completed, the transfer of funds from Dr. C. T. Ekelund to Dr. L. Fernald Foster is authorized as of this date. Carried unanimously.

7. *Increase in Journal Advertising Rates.* Dr. Dempster and Dr. Brunk reported on this proposal, which was the recommendation of the Coöperative Medical Advertising Bureau of the AMA. Motion of Drs. Carstens-Greene that the Publication Committee be authorized to make such adjustments in the advertising rates of THE JOURNAL as it deems advisable. Carried unanimously.

8. *New Councilor.*—Dr. Perry announced that he had appointed Dr. Wilfred Haughey of Battle Creek as Councilor of the Third District, to succeed Dr. Geo. C. Hafford, resigned.

He announced also that he had added Dr. H. H. Cummings to the Legislative Committee; Dr. R. L. Wade to the Preventive Medicine Committee; and Dr. J. M. Robb as a member of the Economics Committee. Motion of Drs. Carstens-Brunk that the changes and additions to the committees be confirmed. Carried unanimously.

9. *Special Committee on Model Constitution and By-laws.*—President Perry presented the suggestion that a special committee be appointed to study the constitution and by-laws of each of the 54 county medical societies of Michigan with a view to developing a model set of regulations for the county medical societies, with the principles conforming to those of the Constitution and By-laws of the M.S.M.S. Motion of Drs. Carstens-Greene that the President be requested to appoint a committee of five to study county medical society constitutions and by-laws and to draw up a model. Carried unanimously.

Recess for Dinner 6:30 to 8:15 P. M.

10. *Press Relations.*—Mr. Lawrence Salter of the *Detroit Free Press* spoke on the necessity of better press relations, so that the public would understand the aims, purposes and activities of organized medicine in Michigan. Mr. Salter was thanked for his good suggestions and great interest.

11. *1937 Annual Meeting.*—The necessity for deciding on the place and time of the next annual

meeting was stressed by Secretary Foster and the Executive Secretary, as one of the items discovered from their attendance at the annual meetings of the Pennsylvania State and Ohio State Medical Societies. The Chairman of the Council, the Secretary, and Executive Secretary were instructed to visit Grand Rapids, contact the local physicians, and look over the facilities available for the 1937 Convention.

12. *Student Health Service*.—A letter from the W.C.M.S. re student health service in universities was read to The Council and referred to Secretary Foster for investigation, and reply to the W.C.M.S.

13. *Secretaries Conference in Chicago*.—The Annual Conference of Secretaries, called by the A.M.A. in Chicago, and scheduled for November 16 and 17, was discussed. Secretary Foster will be a guest speaker. The Executive Committee instructed that the President, the Chairman of The Council, the Secretary, the Editor, and the Executive Secretary be authorized to attend this Conference. Carried unanimously.

14. *Thanks for Help at Annual Meeting*.—A vote of thanks was ordered placed on the minutes to all who helped make the 1936 Annual Meeting of the M.S.M.S. such an outstanding success.

15. *Directory of M.S.M.S. Members*.—The advantages of a Directory of Members in THE JOURNAL, May issue of each year, was discussed. Motion of Drs. Greene-Carstens that a directory of members of the M.S.M.S. be published in the ensuing year, and that publicity on this index be started months in advance. Carried unanimously.

16. *A Vote of Thanks to Dr. Campbell*.—A vote of thanks was expressed to Dr. Alexander M. Campbell for donating six weeks of his time this autumn to conduct refresher courses to physicians having patients in rural areas. A letter of thanks is to be written by President Perry.

17. *Legislative Brochure*.—The advantages of an illustrated brochure on the proposed basic science bill were discussed by the Executive Committee. Dr. Greene suggested the title to be "Do You Wish Qualified Care When You Are Ill?" The Executive Committee instructed that this small booklet be prepared at once.

18. *Adjournment*.—The meeting was adjourned at 9:55 p. m. with the Chair thanking all for their good advice and help.

NOVEMBER MEETING

November 11, 1936

1. *Roll Call*.—The meeting was called to order by Dr. P. R. Urmston, Chairman, at 11:15 a. m. in the Hotel Olds, Lansing. Those present were Dr. Urmston, Bay City; Dr. A. S. Brunk, Detroit; Dr. H. R. Carstens, Detroit; Dr. I. W. Greene, Owosso; Dr. T. F. Heavenrich, Port Huron; Dr. F. E. Reeder, Flint; also Dr. F. T. Andrews, Kalamazoo; Dr. H. H. Cummings, Ann Arbor; Dr. Wilfrid Haughey, Battle Creek; Dr. Henry E. Perry, President, Newberry; Dr. Henry Cook, President-elect, Flint; Dr. F. B. Burke, Detroit; Dr. L. G. Christian, Lansing; Dr. E. Fernald Foster, Secretary, Bay City; and Executive Secretary Wm. J. Burns.

2. *Minutes*.—The minutes of the meeting of October 7, 1936, were read and approved.

3. *Financial Report*.—The monthly financial report was presented and approved.

Membership Report

	1936	1935
Paid from Jan. 1 to Oct. 31, 1936.....	3,651	3,568
(This includes from Wayne County).....	1,413	1,390
Paid from Oct. 1 to Oct. 31, 1936.....	78	65
(This includes from Wayne County).....	63	35

Advertising Sales

Sales for October, 1936.....	\$946.92
Cost of Printing Journal for October, 1936.....	748.40

The bond exchange as recommended by Treasurer Hyland was approved by the Executive Committee on motion of Drs. Carstens-Heavenrich, carried. Bills payable for the month were read and ordered paid, on motion of Drs. Carstens-Reeder, carried unanimously.

4. *Committees of The Council*.—Chairman Urmston presented the following committees of The Council: Vice Chairman: T. F. Heavenrich; Speaker, Frank E. Reeder; Finance Committee, H. R. Carstens, Chairman, F. A. Baker, F. C. Bandy, W. E. Barstow, H. H. Van Leuven; County Societies Committee, I. W. Greene, Chairman, F. T. Andrews, Wilfrid Haughey, Roy H. Holmes, W. A. Manthei; Publication Committee, A. S. Brunk, Chairman, H. H. Cummings; J. Earl McIntyre, Harlan MacMullen, V. M. Moore.

Additions to M.S.M.S. Committees, as made by President Perry, were approved by The Council, upon motion of Drs. Heavenrich-Carstens:

Ethics Committee: F. B. Burke, Chairman, Wm. J. Butler, Grand Rapids; Earl G. Krieg, Detroit; Harold A. Miller, Lansing; Frank E. Reeder, Flint.

Dr. Ray G. Tuck was appointed as Chairman of the Liaison Committee with Dentists, Nurses and Pharmacists. Dr. Florence Ames was approved as Chairman of Woman's Auxiliary Committee.

The Advisory Committee on Industrial Hygiene and Occupational Diseases: Dr. Paul Klebba, Detroit, Chairman; Dr. Carey P. McCord, Detroit; Dr. L. M. Snyder, Lansing. This committee may add to its numbers, if it deems necessary.

Dr. John M. Whalen was made a member of the Contact Committee to Governmental Agencies.

Recess 12:00 Noon to 3:40 P. M. to hear Dr. Thomas Parran, Surgeon General, and to meet with M.S.M.S. Committee Chairmen

5. *Report from Legislative Committee*.—Dr. L. G. Christian, Chairman of the Legislative Committee, outlined the activities of his committee to date. Full discussion ensued.

The Executive Committee expressed perfect confidence in the plans and activities of the Legislative Committee, and congratulated it on its work to date.

6. The second session of the Executive Committee of The Council was called to order at 3:40 p. m. Those present were: Drs. Urmston, Heavenrich, Brunk, Carstens, Greene, Reeder, Perry, Cook, Foster, Barstow, Haughey, Andrews, Pino, Burke, Geib, Christian, Insley, and Executive Secretary Burns.

7. *Relief and Welfare*.—Dr. Insley presented a résumé of the activities of Governor Fitzgerald's Commission on Relief and Welfare, and also a copy of the proposal on relief medicine which he had made to the Commission. Full discussion ensued. Motion of Drs. Reeder-Andrews that Dr. Insley's report be accepted. Carried unanimously.

8. *Medical Economics*.—Dr. Pino presented plans for a panel discussion on the problem of economic insecurity in Michigan as relating to medicine. The Chair read a letter from Rev. Frederic Siedenburgh, S. J., President of the Michigan Conference of Social Work, inviting the Executive Committee of the M.S.M.S. to meet with the Executive Committee of the Michigan Conference of Social Work. The Executive Committee approved Dr. Pino's plans for the panel discussion to be held at the Wayne County Medical Society Building, Detroit, on Wednesday, December 9, at 6:00 p. m.

The invitation of Rev. Siedenburg was accepted and it was felt that this joint meeting should be held a short time after the panel discussion of December 9.

9. *Cancer Committee Publicity*.—Proposed newspaper publicity for speakers who represent the Cancer Committee of the M.S.M.S., was presented by Dr. Brines, through Mr. Clare Gates of the Joint Committee on Public Health Education, and was approved by the Executive Committee on motion of Drs. Greene-Brunk and carried.

10. *Tuberculosis Control Service*.—Dr. Geib stated that State Health Commissioner Slemmons has requested the M.S.M.S. Preventive Medicine Committee to set up a budget for a possible Tuberculosis Division in the State Department of Health. The P. M. Committee is planning on holding a meeting on November 22, and will work out the details of a Tuberculosis Control Service in the State Department of Health as an aid to the State Health Commissioner, but feels that the Department should arrange its own budget as it has trained experts who are well qualified to perform this work. Any help with the general organizational principles and development of the service which the P. M. Committee is able to give will be offered to Commissioner Slemmons.

11. *Medico-Legal Committee*.—Dr. Wm. J. Stapleton, Jr., Secretary of the Medico-Legal Committee, presented several recommendations for tightening up the rules and regulations in connection with medico-legal work. The Executive Committee felt that Dr. Stapleton could very well bring the matter to the attention of the membership by inserting an article in *THE JOURNAL*; that the M.S.M.S. certificate of membership for 1937 should be changed so that it is practically a dated receipt for dues, including medico-legal assessment; that beginning in 1937, a refund of the appropriate percentage of the 50 cent assessment for medico-legal fund should be returned to members for that period after April 1 in which they are suspended for non-payment of dues, together with a note stating that the privileges of the medico-legal fund are denied to suspended members, according to the Constitution and By-Laws of the M.S.M.S. Motion of Drs. Carstens-Heavenrich that this problem and the above suggestions be referred to the Chairman of the County Societies Committee (Dr. Greene) for study and for report at the next meeting of the Executive Committee.

12. *1937 Annual Meeting*.—Secretary Foster gave a report on plans for making the 1937 Annual Meeting the most successful in the history of the Society. An invitation from the Kent County Medical Society to hold the 1937 meeting in Grand Rapids was read. Motion of Drs. Carstens-Greene that the 1937 Annual Meeting of the M.S.M.S. be held in Grand Rapids on September 27, 28, 29, 30, 1937. Carried unanimously.

The Past President's Dinner was discussed, and the Executive Committee voted to invite the entire membership to this affair in future, and make it a strictly informal dinner.

The creation of a Committee on Scientific Work, of no more than five, was discussed. Motion of Drs. Andrews-Greene that the Secretary call a meeting of the Section Officers, and that a Committee on Scientific Work be selected from that group and other members of the Society who are particularly equipped to arrange an excellent scientific program and exhibit. Carried unanimously.

13. *Secretaries Conference*.—The Executive Committee instructed that the Chairman of The Council, the Secretary, and the Chairman of the Legislative Committee arrange the date for the Annual Secre-

taries Conference, and that the program be developed as in the past.

14. *Secretary's Typewriter*.—Motion of Drs. Carstens-Brunk that the Secretary be authorized to purchase a typewriter for his use in Bay City at a price of \$88. Carried unanimously.

Woman's Auxiliary Stationery.—The purchase of same was approved, on motion of Drs. Brunk-Greene. Carried unanimously.

15. *Adjournment*.—The meeting was adjourned at 6:25 p. m. and the Chair thanked all for their attendance and advice.

MINUTES OF JOINT MEETING OF THE LEGISLATIVE COMMITTEE OF THE MICHIGAN STATE MEDICAL SOCIETY WITH THE LEGISLATIVE COMMITTEE OF THE MICHIGAN HOSPITAL ASSOCIATION

September 9, 1936

1. *Roll Call*.—The meeting was called to order in the Michigan Union, Ann Arbor, by Dr. H. H. Cummings at 2:20 p. m. Present representing the Michigan State Medical Society were Drs. H. H. Cummings, Ann Arbor; L. G. Christian, Lansing; F. B. Burke, Detroit; T. K. Gruber, Eloise; L. J. Garipey, Detroit; Grover C. Penberthy, Detroit; and Henry Cook, Flint, and Executive Secretary, Wm. J. Burns. Present representing the Michigan Hospital Association were: Dr. J. S. Hamilton of Harper Hospital, Detroit; Dr. H. A. Haynes, of University Hospital, Ann Arbor; Miss T. M. Gust of Three Rivers General Hospital, Three Rivers; Mr. Walter S. Foster, member of Board of Trustees of Sparrow Hospital, Lansing.

2. *Group Hospitalization*.—The Chair called upon Dr. Gruber as Chairman of the M.S.M.S. Liaison Committee with the Hospital Association to explain the background of the discussion on "Group Hospitalization" at the joint meeting of the Liaison Committees of the M.S.M.S. and the M.H.A. on July 22, 1936; also upon Dr. Hamilton and Mr. Foster to present the viewpoint of the Michigan Hospital Association and its decision to request permissive legislation from the 1937 Legislature. The discussion was entered into by Drs. Haynes, Penberthy, Cook, Burke, Garipey, Christian and Miss Gust.

The question before the representatives of the M.S.M.S. was put by Dr. Cook: Shall we support, or oppose, or be inactive toward this bill for permissive legislation when it is introduced into the Legislature by the Michigan Hospital Association? Further discussion brought out that the safeguards of free choice of physician and free choice of hospital for the people, would be injected into any bill. Dr. Hamilton stated the cases would come into the hospital as private cases, and the patients would have selective ability as to hospital and physician.

Three interesting questions were asked and discussed: Is group hospitalization a matter for the duration of the depression, or is it permanent? How does it affect the hospitals? How does it affect the physicians? Dr. Haynes asked a pertinent question: How many states which have group hospitalization have afflicted child and afflicted adult laws and crippled child laws, etc., such as has Michigan?

The various possible advantages (19 in number) and the various possible disadvantages (14 in number) as listed by the Canadian Medical Association in 1935, were read in detail.

Proposed Group Hospitalization Bill to be presented to M.S.M.S. for study.

The Chair stated that the Legislative Committee

of the M.S.M.S. would like to have an opportunity of reading the proposed bill. Dr. Hamilton stated that he would see that a copy of the M.H.A. proposal is sent to the Legislative Committee of the M.S.M.S. The Chair stated the Committee of the M.S.M.S. would be glad to meet with the representatives of the M.H.A. again, after a study of the proposed bill. It was brought out that this action in no way can be construed to be an endorsement by the M.S.M.S. of Group Hospitalization.

3. *Hospital Lien Law*.—Mr. Foster brought up the matter of a bill giving the hospital a lien in automobile accident cases, etc., said bill having been introduced in the Michigan Legislature in 1933 and 1935, and which will be introduced in 1937. The Chair asked, Mr. Foster to send a copy of the proposal to the Legislative Committee in order that it may study same to ascertain if it could aid the hospital group in its efforts to have the Bill enacted into law.

4. *Adjournment*.—The meeting was adjourned at 3:45 p. m.

MINUTES OF MEETING OF LEGISLATIVE COMMITTEE

September 9, 1936

1. *Roll Call*.—The meeting was called to order in the Michigan Union, Ann Arbor, by Dr. H. H. Cummings, Chairman, at 4:00 p. m. Those present were Drs. H. H. Cummings, Ann Arbor; F. B. Burke, Detroit; L. G. Christian, Lansing; Henry Cook, Flint; L. J. Garipey, Detroit; C. F. Snapp, Grand Rapids. Also present were President Grover C. Penberthy, Detroit; Dr. T. K. Gruber, Eloise; and Executive Secretary Wm. J. Burns. Absent, Dr. H. E. Perry.

2. *Minutes*.—The minutes of the meeting of August 12 were approved as printed and as sent to the members of this Committee.

3. *Basic Science Bill*.—Motion of Drs. Snapp-Christian that the Legislative Committee present the proposed Basic Science Bill to the state organization of Dentists, Nurses, Pharmacists, Morticians, Osteopaths, and social service organizations. Carried unanimously.

A copy of the proposed Basic Science Bill and a synopsis of same will be presented to each of these professional groups when the proposal is completely drafted.

Dr. Garipey read a description of the Basic Science Bill which had been sent by the Policy Committee of the W.C.M.S. to thirty-eight medical groups in Wayne County. This was discussed. The Committee felt it could be the basis for a synopsis of the Bill to go to the professional groups, to the legislators, and the public.

Motion of Drs. Snapp-Burke that the Legislative Committee approve the ideas contained in the W.C.M.S. letter, and that it be changed to fit in with the recommendations made at this meeting to form a synopsis of the Basic Science Bill for the professional groups and the public. Carried unanimously. The Chair appointed a committee to develop the synopsis as per this motion.

Committee: Drs. Garipey, Cook and Snapp.

4. *Proposed Amendments to Medical Practice Act*.—This matter was tabled until copies of same are mimeographed and sent to each member of the Legislative Committee by the Medical Secretary, as per his suggestion.

5. *Legislative Exhibit*.—Dr. Garipey presented plans for this exhibit: Six posters are coming from

the A.M.A., and eighteen are being drawn up by Dr. Garipey. The Chair requested Dr. Garipey to outline the hours of attendance at the booth by members of the Legislative Committee, and to notify him, which Dr. Garipey agreed to do.

6. *Adjournment*.—The meeting was adjourned at 8:45 p. m.

MINUTES OF MEETING OF COMMITTEE ON PREVENTIVE MEDICINE

September 23, 1936

1. *Roll Call*.—A meeting of the Preventive Medicine Committee, sponsored by Dr. Henry F. Vaughan and Dr. Ledru O. Geib, was held at the Detroit Athletic Club, Detroit, on September 23, 1936.

Guests present: Mr. William Scripps of the Detroit News; Mr. A. M. Smith of the Detroit News; Mr. E. C. Woolley, manager of Station WWJ; Dr. C. G. Heyd, Vice President of the American Medical Association; Dean R. B. Allen of Wayne University School of Medicine; Dr. J. D. Bruce, Vice President of the University of Michigan; Dean Lewis of Johns Hopkins Medicine School; Dr. Henry Cook, President-Elect of the Michigan State Medical Society; Dr. C. C. Slemmons, State Commissioner of Health; Dr. Grover C. Penberthy Past President of the Michigan State Medical Society; Mr. George Phillips, Superintendent of Herman Keifer Hospital; Dr. Estabrook, Deputy Commissioner of Health for Detroit; Dr. Henry F. Vaughan, Detroit Commissioner of Health.

Former members present: Dr. C. R. Keyport, Dr. F. B. Miner, Dr. G. M. Byington.

Members present: Dr. Milton Shaw, Dr. R. B. Harkness, Dr. A. L. Callery, Dr. S. W. Hartwell, Dr. J. J. O'Meara, Dr. L. O. Geib.

2. *Tuberculosis Program*.—Dr. Henry F. Vaughan gave a talk on the proposed method of tuberculosis education and plans for cooperation with different agencies including the Medical Profession. A general discussion followed.

3. *Coöperation with the Radio Committee*.—The Radio Committee requested that the Preventive Medicine Committee select three speakers for talks on Tuberculosis, Venereal Diseases, and Communicable diseases. The Chairman of the Preventive Medicine Committee was directed to select such speakers.

4. *State Meeting Dinner*.—It was proposed and carried that a dinner meeting for past and present members of the Preventive Medicine Committee be held at each State meeting in the future.

L. O. GEIB, M.D., *Chairman*.

Carotenemia in Diabetes

Walter Heymann, Cleveland (*Journal A.M.A.*, June 13, 1936), states that the blood serum carotene curves obtained in ten diabetic children after the administration by mouth of carotene in oil were distinctly different from those obtained in twelve nondiabetic, healthy children and demonstrated that the metabolism of carotene is interfered with in diabetes. The carotene content of the blood, when it was once increased in the diabetic patients, failed to show the normal decline and remained elevated or even kept on increasing for from ten to fourteen days after the administration of the carotene in oil had been discontinued. The analogy with the hyperglycemic reaction after sugar is given by mouth to diabetic patients is striking and speaks in favor of assuming that the utilization of carotene has been interfered with in diabetes. The diabetic carotenemia can consequently no longer be explained merely by the high carotene content of the diabetic diet.

COUNTY SOCIETIES

CALHOUN COUNTY

WILFRID HAUGHEY, M.D.

Secretary

The October sixth meeting of the Calhoun County Medical Society was a joint meeting with the Calhoun County Bar Association at the Athelstan Club rooms. Dinner at 7:00 p. m., and meeting after, presided over by Dr. Winslow, president of the County Medical Society.

The minutes of the last meeting were accepted as published in the Bulletin.

All business except candidates for membership was dispensed with.

After a few remarks by the president in regard to this joint meeting, Dr. Melges was called upon to conduct the program. He called upon Dr. Wilfrid Haughey for a few brief remarks of felicitation on having a joint meeting. Mr. Ronald Ryan was asked to speak for the lawyers and then Attorney Lockton introduced the speaker, Dean Leon Green, who is head of the School of Law at Northwestern University. Dean Green has been conducting a crime clinic in Chicago.

Dean Green commented on the fact that the doctor is tolerant of new things but intolerant of his competitors; the lawyer is intolerant of change but tolerant of people. He closed, "I commend to each of you the virtues of the other."

Present at dinner, 55. Doctors at meeting, 69; lawyers, 49.

Dr. Winslow introduced Senator Joe Baldwin, a member of the Bar Association, who in the legislature has cooperated with us and who now favors a basic science law.

The meeting adjourned.

EATON COUNTY

THOMAS WILENSKY, M.D.

Secretary.

The Eaton County Medical Society held its regular October meeting at the Carnes Tavern, Charlotte, on the evening of Thursday, October 29, 1936. Following the dinner, a short business meeting was held during which plans were made for a dinner and entertainment to be tendered the Woman's Auxiliary to the Eaton County Medical Society.

Speakers of the evening were four of the senior members of the society. Every one a dean of the practice of medicine in Eaton County, they provided an unusual and fascinating portrayal of medicine and its magnificent advances during the past half century. Dr. Burleson of Olivet, the first speaker, in reminiscent vein, recounted the tale of a patient, in the year 1860, who was saved by his own instinctive courage. It appears that the patient, having been seriously ill with abdominal complaint and rapidly growing worse, was informed, after a consultation of physicians, that he was grievously stricken with inflammation of the bowels and that the outlook was gloomy, indeed. The patient, dismayed by the unconditional surrender of his physicians, insisted that his belly contained something that "wanted out," and he ordered them to perform an operation. Grudgingly, they consented to carry out his orders and lo! the invading scalpel struck a huge

pus-containing cavity which drained and drained until complete recovery ensued. Dr. Burleson remarked that this was probably one of the very first appendiceal abscesses to be surgically treated in this country. Then, in highly scientific and very modern fashion, Dr. Burleson reported a case of coronary infarction complete with laboratory and postmortem findings. This case was instructive because the excruciating pain had an unusual radiation to the right nipple.

Dr. C. S. Sackett of Charlotte, speaker number two, gave the history of one of his very earliest clinical mysteries. This young man, suddenly stricken with severe, rapidly progressive illness and seen in consultation by excellent clinicians of that day, about thirty-five years ago, was diagnosed only on the autopsy table, as being affected with miliary tuberculosis. Dr. Sackett reported also the case of a young woman with tremendous splenomegaly. This occurred also about thirty-five years ago, previous to the use of routine blood smears and the day of the hematologist. Splenectomy was successfully carried out at the University Hospital in Ann Arbor and the patient survived for many years. One can only conjecture the nature of the splenic tumor. The speaker concluded his talk by reviewing the history of the Eaton County Medical Society from its birth, in 1902, to the present time. The younger members of the society were surprised to learn of the number of doctors who were engaged in practice in the small communities. The lack of telephones, and horses and buggies as the only means of transportation, very definitely defined the amount of work which a doctor was able to carry out in one day.

Dr. Phil Quick, third of the seniors to hold the floor, reminisced in a delightful and intensely interesting fashion on the medicine of years ago in Michigan. Dr. Quick told his audience of his friendship with a Dr. Warren who graduated in medicine at Ann Arbor in 1855. Those were the days when the medical student had to hustle his own cadaver on some dark and gloomy night. Dr. Quick remembers when the faculty at Ann Arbor were divided as to whether or not the tubercle bacillus was responsible for consumption. Dr. Gibbs, pathologist at the school, would not recognize the term tuberculosis, persisting in calling the disease phthisis, and was eventually dismissed because he refused to teach what every layman now recognizes as common knowledge. Dr. Quick remembers when the rod-like bacteria of diphtheria were discovered and the controversy which raged as to their true significance. There was a school of thought which attributed the severe symptoms to the diphtheritic membrane and another school which supposed that a toxin absorbed into the blood stream was the responsible agent. Dr. Quick related how the disease was treated originally by spraying powdered sulphur and a solution of iron into the respiratory passages. Then, taking a page from the books of Louis Pasteur, an antitoxin was developed and exhibited thrillingly in 1896 and 1897.

Dr. Quick recalled the advent of the roentgen ray in 1895, followed by the cystoscope and in ever-increasing numbers new and fine instruments for the practice of medicine and surgery. About this time, too, intravenous administration of fluids and medications was introduced and rapidly developed. The handicaps of thirty years ago were legion; no hospitals, no telephones, no motorcars, no ambulance, no nurses. Practice was difficult, slow and poorly paid. The roads were often only bridle paths and well nigh impassable during the winter's snows. But there were compensations. The doctor knew each patient intimately because he spent a great

INGHAM COUNTY

RUSSELL HIMMELBERGER, M.D.
Acting Secretary

deal of time with him or her. He usually understood the patient and was completely trusted by him. The hustle and bustle and feverish rush of today were not yet apparent. Life was simpler and perhaps more full than today. Malpractice suits were unheard of and it was surprising, in the absence of x-rays and refined apparatus, how few were the poor results of fracture treatment.

Dr. C. A. Stimson of Eaton Rapids, now a proctologist, in Lansing, but who formerly, for many years, practiced general medicine in Eaton Rapids, was then called upon to add his pearls of wisdom to the remarks of his colleagues. The doctor, who is a philosopher of no mean proportions and a profound student of his fellow man, defined, in a uniquely characteristic fashion, how we have progressed from the day of "devotion to life" which he calls "meat and potatoes" to the present "art of living" period whose coat of arms is "salad and caviar." The speaker pointed out clearly to what extent our present sum of knowledge is derived from the old empiricism and how true science and out-and-out quackery have both, albeit to differing degrees, contributed to modern advances. As a striking example, he mentioned the evolution of the treatment of old infected wounds with maggots.

The meeting adjourned at 10 p. m., bringing to a close one of the most unusual and inspiring programs it has been the privilege of this reporter to attend.

GENESEE COUNTY

C. W. COLWELL, M.D.
Secretary

At the meeting of the Genesee County Medical Society held at the Dresden Hotel, Tuesday evening, October 27, 1936, officers for the coming year were nominated as follows: President-elect, Drs. Rundles, McArthur, and Gundry; treasurer, Drs. Morrissey and Rosenblum; medical legal officer, Drs. Randall and O'Neil; delegate, Drs. Scott and Curry; three year alternate delegate, Drs. Wright and Halligan; two year alternate delegate, Drs. Kirk and Baske.

The Chair then appointed a radio committee composed of Dr. Kirk, Chairman, and Drs. Chambers, Curry, and Goering.

Dr. Reeder reported for a committee investigating the number of meetings held by the Society. He recommended that one social and business meeting and one meeting where a scientific program be presented be held each month. This recommendation was adopted unanimously by the Society.

Dr. Probert then reported for the committee on Preventive Medicine.

Dr. Halligan then discussed in detail a particular type of deferred payment plan which could be altered or amended to suit this particular Society if the physicians desired such a plan. After much discussion it was moved by Dr. Hague that a deferred payment plan in Genesee County should be tabled indefinitely. Seconded and passed.

Dr. Cook then recommended that a resolution be adopted by the Medical Society stating that we as individual physicians would care for our own patients, using an individual deferred payment plan according to the patient's ability to pay, and that this resolution be mailed to such organizations as the Probate Judges, Director of the Welfare Department and others. Dr. Orr moved that we adopt this resolution. Seconded and passed unanimously.

Meeting adjourned.

The regular monthly meeting of the Ingham County Medical Society was held at the Hotel Olds, October 27, 1936, with seventy members present. Following the dinner at 6:30 P. M. the meeting was called to order by the President, Dr. E. I. Carr.

The minutes of the previous meeting, as published in the Bulletin, were approved.

Dr. Snyder reported for the Public Relations Committee that the prosecutor's office had assured him that the Neon signs of chiropractors using the title "Dr." in a manner prescribed by law will be attended to. *The Lansing State Journal* was also spoken to about the use of "Doctor" with reference to unauthorized persons.

The motion of Dr. Shaw of one month ago was then taken up. This provided for a program of preventive medicine and health work for the county to be sponsored by the Medical Society. The report and recommendations of the committee appointed for this purpose were read by Dr. Stucky, and each of the following subjects was thoroughly discussed:

1. School Health.
2. Establishment of a County Health Unit.
3. Venereal Disease Control.
4. Tuberculosis Control.
5. First Aid.
6. Cooperation with City and County Health Departments.

The remainder of the meeting was taken up in the showing of movies of "The Doctors at Play." Meeting adjourned.

NORTHERN MICHIGAN

GILBERT B. SALTONSTALL, M.D.
Secretary

The regular meeting of the Northern Michigan Medical Society was held on October 6, 1936, at the Perry Hotel, Petoskey, Mich. Guests: Edward Sargent, Levering and Douglas Tibbits, Boyne City.

After the usual dinner a short business meeting was held. Then Dr. Engle opened the discussion with a résumé of the proposed "Basic Science Law," giving the history of basic science legislation in other states, the need for similar legislation in Michigan, and the effect on the public health of the state that may be expected to result from raising the educational standards. Several members of the Society continued the discussion, bringing up some very important aspects of the subject.

Mr. Sargent responded by stating that he has always been a friend of the medical profession and could see the advantages of such a law. While he did not desire to make a definite stand on the Basic Science Law before further study, we were led to believe from his remarks that he was favorably impressed.

Mr. Tibbits agreed with Mr. Sargent. By his remarks he insinuated that when the bill was presented to the House he would support it.

At the close of the meeting Dr. Engle presented each of our guests with a copy of the Basic Science Law.

Rep. Fenlon of St. Ignace, who had planned to be with us, was unable to attend due to an unavoidable business matter. He called from Detroit expressing his regrets and assuring us that he would support any legislation proposed by the medical profession if re-elected.

WASHTENAW COUNTY

S. L. LAFEVER, M.D.

Secretary

The Washtenaw County Medical Society held its regular dinner and business meeting at the Michigan Union at six P. M., October 6, 1936. Dr. Norman F. Miller presided. There were fifty-three members attending the dinner and about twenty additional members attended the scientific program. The minutes of the meeting of June 9, 1936, were approved as printed on the programs.

Dr. John S. De Tar, Public Relations Committee Chairman, reported progress on work being done by his committee.

Dr. L. J. Johnson, Dr. H. B. Britton, and Dr. Walter Maddock were appointed to serve on the Amendment Committee.

The following scientific program was then presented: "Minor Ano-Rectal Diseases and Their Treatment," by Dr. Louis J. Hirshman, of Detroit. Discussion by Dr. L. J. Johnson was comprehensive and to the point.

The meeting adjourned at 9 P. M.

Fluid Postoperatively

Bernard Fantus, Chicago (*Journal A. M. A.*, July 4, 1936), recommends that excepting in emergency, hypohydrated and salt-starved patients must not be sent to the operating room. If it were a standing order that no patient should be sent to the operating room unless he had passed at least 1,500 c.c. of urine in the preceding twenty-four hours and this urine contained at least 0.5 per cent of chloride, this requirement would be automatically met. Patients who cannot be prepared in this way for the operative ordeal should receive special care during, as well as after, operation to minimize the disadvantage from which they are suffering. Patients who have undergone serious operations should have a salt and fluid balance sheet established for them in which the quantities of fluid administered and of urine eliminated are carefully recorded and a balance is struck at least every twelve hours to warn the attending physician of approaching danger. The salt elimination in the urine should be estimated postoperatively in the following manner: Ten drops of urine are placed in a test tube, to which 1 drop of a 1 to 5 potassium chromate solution is added. The fluid will now assume a somewhat distinctly yellow color. A 2.9 per cent silver nitrate solution is added, drop by drop, until a permanent and distinct color change to red-brown occurs. The number of drops required to produce the change of color expresses in grams the content of chloride per liter of urine. Sugar should also be tested for in the urine not only preoperatively but postoperatively as well, and the qualitative test probably suffices. When sugar is found to be present in the urine of a patient who is given dextrose, it is an indication that the patient is receiving more dextrose than he can take care of. If the patient is receiving large quantities of dextrose, the obvious indication is to reduce the intake. If this intake has not been excessive, the administration of insulin may possibly be life saving, for some of these patients may have been rendered temporarily diabetic. Postoperative use of fluids, to be properly individualized, demands observation of balance between fluid intakes and fluid elimination, the determination of the percentage of chloride in the urine and the testing for the presence in it of sugar.

WOMAN'S AUXILIARY

MRS. A. V. WENGER, *President*, 132 Grand Avenue, N.E., Grand Rapids.

MRS. CARL F. SNAPP, *Secretary-Treasurer*, 980 Plymouth Road, S.E., Grand Rapids.

MRS. FRANK W. HARTMAN, *Press Chairman*, 7440 La Salle Blvd., Detroit.

Bay County

The first meeting of the Women's Auxiliary to the Bay County Medical Society was held on Wednesday, October 38, at the Elk's Club. Dinner was served at 6:30 o'clock to thirty members. Mrs. A. L. Ziliak, the new president, presided at the business meeting, held after the dinner.

The annual dues were raised to two dollars, because of the change in the National dues. It was decided that the Auxiliary give a card party at the Nurses' Home on November 10, in order to make money for the Treasury. Tea was served following the bridge. All the members pledged themselves to fill one table each.

Convention reports were given by the delegates. Later, Mrs. Patterson, Red Cross Chairman, gave a most interesting talk.

The officers for 1936-37 are the following: President, Mrs. A. L. Ziliak, president-elect; Mrs. R. E. Scrafford, vice president; Mrs. A. D. Allen, recording secretary, Mrs. W. G. Gamble, corresponding secretary and press chairman; Mrs. C. S. Tarter, treasurer; Mrs. E. M. Gale. The committee chairmen are: Telephone—Mrs. D. J. Mosier; Food—Mrs. P. R. Urmston; Membership—Mrs. C. M. Swantik; Program—Mrs. R. C. Perkins; Social Committee—Mrs. M. R. Slattery.

Saginaw County Woman's Auxiliary
Begin Season

New committee chairmen were appointed at a meeting of the Saginaw County Medical Society Woman's Auxiliary Tuesday evening, October 27, at the Robinson tea room. Mrs. Arthur E. Leitch presided at the business session and announced the committees as follows:

Program—Mrs. Milton G. Butler, chairman; Mrs. Charles R. Murray, Mrs. J. Orton Goodsell, Jr., Mrs. Frederick J. Cady and Mrs. G. E. Tiedke.

Public Relations—Mrs. Robert Jaenichan, chairman; Mrs. W. P. Martzowka, Mrs. D. E. Thomas and Mrs. A. Raymond Moon.

Entertainment—Mrs. Arthur Grigg, chairman; Mrs. Stuart Yntema, Mrs. Ralph S. Jiroch, Mrs. Clarence E. Toshach and Mrs. David E. Bagshaw.

Legislation—Mrs. Lloyd A. Cambell, chairman; Mrs. William J. O'Reilly and Mrs. J. H. Powers.

Publicity—Mrs. L. C. Harvie; flowers, Mrs. Bagshaw; telephone, Mrs. S. A. Sheldon; membership, Mrs. Henry J. Meyer; hygiea, Mrs. J. A. McLandress.

The members voted to send twenty subscriptions of the *Hygiea* magazine, issued by the American Medical Association, to rural schools throughout the county.

Bridge was enjoyed afterward, the auction bridge prize going to Mrs. W. K. Anderson and the contract prize to Mrs. J. A. Maurer. Mrs. B. H. Beckwith won the house prize. Supper was served after the games.—*Saginaw News*.

Sue—Have you read "Finis"?

Joe—No, what is it?

Sue—It's the last word in books.

Invitational Golf, M. S. M. S.

Detroit Golf Club, September 22, 1936

UNDER most ideal conditions, eighty-six members of the Michigan State Medical Society enjoyed invitational golf at Detroit Golf Club on the afternoon of Tuesday, September 22, 1936. This September day was graced with weather so ideal as to surpass the well-advertised climatic conditions of our southwesterly states! The two eighteen hole golf courses were in perfect condition, as usual. The local committee composed of Dr. C. D. Brooks, Chairman, Drs. Donald V. Clark, R. C. Leacock, L. J. Morand, L. S. Potter, and Walter Wilson, had worked up every detail to the nth perfection. Everyone was in a most happy mood, and even President Grover C. Penberthy, defeated two-down by Dr. Henry Cook, Chairman of The Council, took his losses (the game, and \$5.00 per hole) with a big grin.

During the dinner, the prizes were presented by Chairman Brooks, who also announced the individual scores.

GOLF SCORES—1936

Championship Flight

Scratch to 10, inclusive

	G	H	Net
C. F. Thomas, Detroit.....	86	6	80
John Murphy, Detroit.....	77	0	77
W. G. Reid, Jr., Detroit.....	78	9	69
A. B. Wilkinson, Detroit.....	85	10	75
E. A. Hand, Ann Arbor.....	81	6	75
Frank A. Kelly, Detroit.....	87	9	78
John E. Hauser, Detroit.....	80	8	72
H. A. Burrows, Dearborn.....	88	10	78
Theo. Hoffman, Vassar.....	83	5	78
F. C. Bandy, S. S. Marie.....	81	10	71
R. H. Baribeau, Battle Creek.....	90	10	80
A. A. Humphrey, Battle Creek.....	97	9	88
J. H. Albers, Lansing.....	79	6	73
H. Hansen, Battle Creek.....	93	10	83
D. A. Cameron, Royal Oak.....	84	8	76
A. P. Ohlmacker, Royal Oak.....	86	5	81

First Flight

11 to 15, inclusive

C. D. Brooks, Detroit.....	86	14	72
L. S. Potter, Detroit.....	87	14	73
Jos. Schirk.....	91	12	79
H. V. Dwyer, Detroit.....	85	11	74
J. C. Kenning, Detroit.....	89	15	74
C. A. Teifer, Muskegon.....	88	15	73
R. J. Hubbell, Kalamazoo.....	95	11	84
R. C. Jamieson, Detroit.....	79	15	64
J. H. Cobane, Detroit.....	89	12	77
R. B. Harkness, Hastings.....	89	13	76
D. J. Leithauser, Detroit.....	89	15	74
W. Rundles, Detroit.....	89	11	78
A. E. Schiller, Detroit.....	94	14	80
W. Wilson (guest)			

Second Flight

16 to 20, inclusive

F. W. Organ, Detroit.....	101	20	81
W. L. Hackett, Detroit.....	87	20	67
Geo. Reberdy, Detroit.....	88	20	68
N. McLaughlan, Detroit.....	101	18	83
O. A. Brines, Detroit.....	91	18	73
W. R. Clinton, Detroit.....	87	16	71
A. E. Catherwood, Detroit.....	91	19	72
E. O. Cooper, Detroit.....	106	18	88
Frank E. Reeder, Flint.....	89	18	71
N. McKinstry (guest)			

Third Flight

21 to 27, inclusive

	G	H	Net
George E. Potter, Detroit.....	97	26	71
R. J. Elvidge, Detroit.....	98	25	73
A. R. Sanderson, Detroit.....	99	24	75
B. E. Burnell, Flint.....	99	22	77
C. D. Monro, Jackson.....	103	24	79
W. H. Squires, Eloise.....		22	
Geo LeFevre, Muskegon.....	113	25	88
C. P. Clark, Flint.....	99	22	77
Ed. Minor, Detroit.....	95	22	73
Louis Morand, Detroit.....	92	22	70
B. W. Morse, White Hall.....	96	26	70
W. E. Miller, Detroit.....	90	21	69
W. A. Manthei, Lake Linden.....	95	25	70
C. E. Boys, Kalamazoo.....	98	25	73
H. F. Mattson, Hillsdale.....	92	25	67
D. P. Foster, Detroit.....	94	24	70
D. R. Wright, Flint.....	107	24	83
C. F. Vale, Detroit.....	98	23	75
B. T. Larsen, Pontiac.....	92	23	69
B. C. Abbott, Pontiac.....	93	23	70
B. M. Mitchell, Pontiac.....	98	27	71
M. E. Danforth, Detroit.....	90	27	63
J. M. Robb, Detroit.....	103	25	78
C. E. Dutchess, Detroit.....	97	22	75
H. A. Luce, Detroit.....	105	26	79
Robert Beattie, Detroit.....	96	25	71
Phil. Riley, Jackson.....	109	25	84
J. J. O'Meara, Jackson.....	115	25	90
A. V. Forrester, Detroit.....	132	25	107

Fourth Flight

28 to 30, inclusive

H. J. Butler, Detroit.....	102	30	72
D. L. Treat, Flint.....	97	30	67
E. A. Thayer, Jackson.....	126	30	96
E. W. Fitzgerald, Detroit.....	126	30	96
J. R. Rupp, Detroit.....	112	30	82
S. E. Barnett, Detroit.....	138	30	108
S. E. Gould, Detroit.....	144	30	114
H. J. Kullman, Detroit.....	111	30	81
Henry Cook, Flint.....	110	30	80
G. C. Penberthy, Detroit.....	115	30	85
H. S. Karr, Detroit.....	120	29	91
W. A. Hackett, Detroit.....	109	29	80
W. Cowan, Detroit.....		28	
Walter J. Wilson, Detroit.....	107	28	79
M. H. Hoffman, Detroit.....	106	28	78
F. A. Mercer, Pontiac.....	98	28	70
J. L. Kubanek, R. L. Howard (guests)			

INVITATIONAL GOLF

CHAMPIONSHIP OF THE FIELD

PRIZE

DONOR

WINNER

Low Gross
 Presidents Trophy—M.S.M.S.....Dr. Grover C. Penberthy, Detroit.....Dr. John M. Murphy, Detroit
 Low Net
 Council Chairman's Prize—M.S.M.S.....Dr. Henry Cook, Flint.....Dr. M. E. Danforth, Detroit
 (Fitted Traveling Kit)

FIVE FLIGHTS

Championship Flight Scratch to 10 (incl.)

Low Gross
 Cocktail ServiceWayne County Medical Society.....Dr. W. G. Reid, Detroit
 Low Net
 Silver and Blue Shaker Set.....Dr. Philip A. Riley-Jackson.....Dr. F. C. Bandy, S. S. Marie
 (Vice-Speaker of The House)

First Flight 11 to 15 (incl.)

Low Gross
 Pres.-elect, M.S.M.S. Prize (Silver Console
 Set)Dr. H. E. Perry, Newberry.....Dr. H. V. Dwyer, Detroit
 Low Net
 Comb and Brush Set.....Dr. L. Fernald Foster, Bay City.....Dr. C. A. Teifer, Muskegon
 (Chairman of Public Relations Committee)

Second Flight 16 to 20 (incl.)

Low Gross
 Secretary's Prize—(Silver Cigarette Case)...Dr. C. T. Ekelund, Pontiac.....Dr. W. R. Clinton, Detroit
 Low Net
 Wayne Councilors' Prize—("Water Boy"
 Thermos Set)Drs. A. S. Brunk and H. R. Carstens,
 Detroit.....Dr. W. L. Hackett, Detroit

Third Flight 21 to 27 (incl.)

Low Gross
 W.C.M.S. President's Prize—(Irish Setter)..Dr. T. K. Gruber, Detroit.....Dr. W. E. Miller, Detroit
 Low Net
 Vacuum Water Pitcher Set.....Dr. E. I. Carr, Lansing.....Dr. H. F. Mattson, Hillsdale
 (Pres., Ingham Co. Med. Society)

Fourth Flight 28 to 30 (incl.)

Low Gross
 Cocktail SetDr. F. B. Burke, Detroit.....Dr. D. L. Treat, Flint
 2nd Gross
 Utility Valet Set.....Dr. J. M. Robb, Detroit.....Dr. F. A. Mercer, Pontiac
 (Past-Pres., M.S.M.S.)

MATURITY EVENT

Limited to Members Aged 50 Years and Over

Low Gross
 "Fit-All"Bill Mennen, of The Mennen Co., Newark,
 N. J.Dr. R. C. Jamieson, Detroit
 2nd Gross
 James H. Dempster Trophy—(Gold Cup)....J. R. Bruce of Bruce Pub. Co., St. Paul....Dr. C. D. Brooks, Detroit
 3rd Gross
 Tommy Armour Golf Shirt.....Dr. Henry Luce, Detroit.....Dr. F. A. Kelly, Detroit
 Highest Gross
 Desk Clock and Calendar.....Bill Burns, Exec. Sec'y, Lansing.....Dr. Geo. LeFevre, Muskegon

KICKERS HANDICAP

1st. Golf BagBill Mennen, The Mennen Co., Newark, N. J.. Dr. O. A. Brines, Detroit
 2nd. End TableDr. Wm. A. Hyland, Grand Rapids.....Er. B. M. Mitchell, Pontiac
 3rd. Golfers AssistantDr. Franklin Reeder, Flint.....Dr. Geo. Potter, Detroit
 (Speaker of The House)

HIGHEST GROSS SCORE OF THE FIELD

"Fit-All"Bill Mennen, The Mennen Co., Newark, N. J.. Dr. S. E. Gould, Detroit

OBITUARY

Dr. Frank Webster Garber

In the death of Dr. Frank Webster Garber on November 9, 1936, Muskegon and the State have suffered a distinct loss which will be felt keenly by the medical profession and by hospital organizations. Dr. Garber was a pioneer in hospital management and his life was devoted to the improvement of hospital facilities. He also led the development of surgery in Western Michigan, and his opinions were continually being sought because of his wide consultative experience.

Dr. Garber was born in Summit County, Ohio, on May 24, 1859. He received his early education in the country schools of that region and later attended Buchtil College, which is now the University of Akron. He then entered Rush Medical College, which later became the University of Chicago, and was graduated from that institution in 1888. He came directly to Muskegon to start his practice of medicine. Having the advantage of the best medical and fundamental education possible at the time, and being possessed of an active and clear mind, he soon occupied an enviable position in the local medical fraternity.

During the winter of 1903-04, Dr. Garber spent eight months in advanced study of surgery in Europe, particularly Vienna. He returned to Europe in 1911 in the company of Dr. George L. LeFevre to study in Edinburgh, Scotland, and France. In 1915 he was granted a Fellowship in the American College of Surgeons, being one of the first physicians in Western Michigan to receive that honor.

With the establishment of Mercy Hospital in 1903 and Hackley Hospital in 1904, he took an active part in the development of the hospital side of the practice of medicine. In 1918, upon the retirement of Dr. Vanderlaan, he was elected Chief of Staff of Hackley Hospital and held that position until his death. He also was Vice-chief of Staff of Mercy Hospital from the time of its staff organization.

He was a member of the Muskegon County Medical Society since its original organization and served as its president. He also held the position of official delegate for many years. He was a fellow of the American Medical Association and of the Michigan State Medical Society.

He contributed his share to the civic and cultural life of the city, being a director of the Lumberman's National Bank, director of the Bankers Trust Company, president of the Lyons Machine Company and an active member of the Muskegon History Club.

On February 27, 1888, Dr. Garber was married to Miss Ada Jacob, who survives him. Dr. Frank Garber, Jr., a son, has been in practice with his father since 1923. A daughter, Mrs. S. C. Hollister, is living in Ithaca, N. Y.

The staffs of both local hospitals and the medical profession will long remember the work he has done and be cognizant of the loss his death has brought.

GEORGE L. LEFEVRE, M.D.

Bernard A. O'Hora, M.D.

Dr. Bernard A. O'Hora of Detroit, died October 29, 1936, at his home after an illness of a year. He was born in Black Earth, Wisconsin, forty-seven years ago, and graduated from the University of Wisconsin in 1914, and the Washington University of Medicine in 1916. With the exception of a year and half with the Army Medical Corps as a

first lieutenant during the World War, he was a member of the staff of Henry Ford Hospital from 1917 to 1925. In 1925, he entered private practice. Dr. O'Hora was chief of the Department of Otolaryngology of Woman's Hospital and a member of the staffs at Harper and Children's Hospitals. Dr. O'Hora was a fellow of the American College of Surgeons, and a member of the Wayne County Medical Society, the American Medical Association and the American Academy of Otolaryngology. He was also a member of Nu Sigma Nu, Alpha Omega Alpha, the Detroit Athletic Club and was a Past Commander of the Business and Professional Men's Post of the American Legion. Surviving are three children: Bernard, Jr., John and Dennis; his mother, Mrs. James O'Hora of Mazomanie, Wisconsin; three sisters, Mrs. M. W. Showers of Mazomanie; Mrs. W. W. Greiling of Detroit, and Miss Margery O'Hora of Chicago, and three brothers, John, of Chicago; Ray, of Washington, and Dr. James O'Hora of Detroit.—*Detroit Medical News*.

Frederick E. Zumstein, M.D.

A long illness resulted in the death, October 30, 1936, of Frederick Ernest Zumstein, at his home, 5105 Second Boulevard, for thirty-six years a practicing physician in Detroit.

Dr. Zumstein was born in Berne, Switzerland, March 10, 1866, and came to Detroit, in 1870. After graduating from old Central High School, he became a machinist and in that capacity was associated with the late Henry M. Leland. He was one of the first linotype machinists in Detroit, being in charge of the machines at the *News* and later holding a similar position with the *Cincinnati Post*. While there he studied medicine at the Miami Medical College, obtaining his medical degree in 1900. After taking post-graduate work under Dr. T. C. Janeway, he returned to Detroit in 1901. He was a member of the Wayne County and Michigan State Medical Societies and the American Medical Association and had served for several years as a Trustee of the Central Woodward Christian Church. Surviving are his wife, Joan; three sons, Harold of Detroit, Arnold of New York City, and Frederick, Jr., of Detroit, and three daughters, the Misses Hazel and Elizabeth Zumstein and Mrs. C. R. Robertson.—*Detroit Medical News*.

CORRESPONDENCE

To the Officers and Members of the
Michigan State Medical Society
Dear Doctors:

I was surprised and grateful to receive the paper conveying the fact that I was elected an Emeritus Member of the Michigan State Medical Society. I cannot find words which mean enough to convey the fact that I am grateful and pleased to get this notice. I prize it above all my many papers, as it means so much. As I am unable to practice longer, I have this nice paper to show that I was thought something of. One thing, I have traveled the snowy roads of Michigan many years, twenty of them being in Emmet County, some times 40 below. What of it? When some one was suffering I always did my best.

I thank you all from the bottom of my heart.

I think it likely I will remain in California, as I seem to be better, and I shall try to keep posted in the many new things in Medicine.

Fraternally yours,

J. W. HAWKEY, M.D.,
1230 S. Rose Avenue,
Santa Ana, California.

October 29, 1936.

JOUR. M.S.M.S.

To the Officers and Members,
Michigan State Medical Society.

My dear Doctors:

My election to Emeritus Membership in the Michigan State Medical Society is very much appreciated. The honor gives me great happiness.

My sincere thanks to the House of Delegates and to you personally for your very kind and friendly letter.

Yours very truly,

ALOIS THUNER, M.D.,
495 San Fernando Street,
Point Loma, California.

November 1, 1936.

C. B. McDonald, D.C.
225 Pipestone Street
Benton Harbor, Michigan

Dear Sir:

You have inquired as to whether the State Director of Laboratories properly advised you that the service of the analysis of blood specimens in cases of syphilis was not available to chiropractors.

According to the definition of the practice of chiropractic contained in the Chiropractic Act, the procuring of specimens of blood from patients or the diagnosis of blood with or without the aid of a report from the State Health Department, is not within the province of the practice of chiropractic, and accordingly the Director of Laboratories advised you that such service would not be available to chiropractors, in accordance with the language of that Act.

Very truly yours,

DAVID H. CROWLEY,
Attorney General.
By MILTON G. SCHANCUPP,
Assistant Attorney General.

October 15, 1936.

On October 13, 1936, in accordance with the provisions of Section 2, Act 237 of the Public Acts of 1899, of the state of Michigan, the Michigan State Board of Registration in Medicine, in executive session assembled in the City of Lansing, County of Ingham, did revoke the medical licensure, No. 8082, issued October 15, 1915, to William D. Rea, of Minneapolis, Minnesota, who was charged with violation of subsection 6, Section III of Act 237, Public Acts of 1899, as amended, which reads as follows:

"Sixth. The Board of Registration in Medicine may refuse to issue or continue a certificate of registration or license provided for in this section, to any person guilty of grossly unprofessional and dishonest conduct. The words 'unprofessional and dishonest conduct,' as used in this act, are hereby declared to mean

"(d) All advertising of medical business in which grossly improbable statements are made * * *"

At this same session, the license of Douglas Hurst Radcliffe, No. 11513, issued July 5, 1929, living in Detroit, Michigan, was suspended until June, 1937, pending a hearing before this board, at which time he will be cited to show cause why his medical licensure should not be revoked for having been convicted of violation of "(a) the procuring, aiding or abetting in procuring a criminal abortion" in the case of People v. Radcliffe, A 9400, Recorder's Court of the City of Detroit, of which violation he was adjudged guilty.

Sincerely yours,

J. E. McINTYRE, *Secretary*,
Michigan State Board of
Registration in Medicine.

November 4, 1936.

DECEMBER, 1936

MICHIGAN'S DEPARTMENT OF HEALTH

C. C. SLEMONS, M.D., Dr.P.H., Commissioner
LANSING, MICHIGAN

Notes on Communicable Diseases

The high point in the incidence of poliomyelitis has occurred this year a little later than usual. For the preceding five years, September has, in each instance, been the month when the greatest number of cases was reported. This year there were reported thirty-seven cases in September, and sixty in October. The incidence has been highest in the southern counties.

Typhoid fever, likewise, has had a somewhat delayed seasonal incidence this year. The peak for this disease is usually in September, occasionally in August, and rarely in October. For this year there were reported thirty cases in August, forty-one in September, and forty-eight in October. The cases have all been scattered and there have been as yet no definite outbreaks located. However, there have been certain areas of the state where there was an unusual endemic incidence. It is possible that in one or two locations there may be a common source for a number of cases.

Scarlet fever continues to show a somewhat higher incidence than was shown in 1935. The record for October indicates twice the amount occurring in September and approximately a 20 per cent increase over that of October, 1935.

Diphtheria continues low in incidence but more or less localized in certain areas which appear to have a higher than average endemic rate. Health authorities in such communities are alert to the situation and are endeavoring to bring about the immunization of younger children, especially.

The measles incidence is very low, and whooping cough remains about normal.

Some of the more rare diseases which have been reported recently are actinomycosis, ankylostomiasis, leprosy and epidemic encephalitis.

Improvement of Water Supplies

Completion of the new water supply system for Grosse Ile Township during the past month marks the removal of one of the most unsafe supplies in the state, according to the Bureau of Engineering. The new supply will be furnished through an arrangement with the City of Detroit and a booster section, two elevated tanks, the water main across the Detroit River and 18 miles of water mains have been completed to handle the new safe supply.

It is expected that the new supply will replace the badly contaminated supplies furnished by several privately owned water systems which pumped the raw polluted water from the Detroit River without treatment of any kind. The hazard of this practice was demonstrated by a typhoid rate many times that of the average for the state.

The elimination of several unsafe water supplies, the construction of five water filtration plants and five new municipal water systems, and the issuance of 137 water main extension permits mark the general improvements in the water supplies of the state for the past year, the bureau reports. Big Rapids, Owosso, New Baltimore, Muskegon and Marine City are constructing new plants.

Nashville and Reed City have changed from untreated river supplies to safe ground water supplies and Grosse Ile has installed its new distributing

system. Minden City, Bear Lake, Clifford and Bates Township, Iron County, have each installed new public water supplies and distributing systems.

Albena, Highland Park, Bay City, Midland, Utica, and Wyandotte have made additions to their filtration plants and Detroit has completed the construction of the Springwells plant. Elk Rapids has constructed a new pumping station and intake system.

Health Hazards in the Dry Cleaning Industry

A joint investigation of the health hazards found in the dry cleaning industry in the Detroit metropolitan area was reported at the annual meeting of the American Public Health Association by Dr. Carey P. McCord, Director, Detroit Bureau of Industrial Hygiene, and John M. Hepler, director, Bureau of Industrial Hygiene, Michigan Department of Health.

Among the conclusions arrived at were the following:

1. The total number of dangerous substances used in dry cleaning and ancillary operations is far in excess of the small number customarily associated with the dry cleaning industry.

2. In every instance of the use of chlorinated solvents or mixtures of chlorinated solvents with petroleum fractions as primary dry cleaning fluids, a definite exposure was found to exist. If these solvents are to be safely used in this industry, an extensive revision of current operating practices is in order.

3. In most instances where very volatile petroleum fractions such as cleaner's naphtha and gasoline were used, unsafe concentrations of the vapors of these solvents were found to exist.

4. Regardless of the type of solvent in use, almost without exception some degree of dermatitis occurs on the hands and arms of workers. In many instances the degree of injury is trivial and of slight duration.

5. In general, it is believed that the other hazards of the industry such as unnatural postures, tenovitis, excessive humidity, moisture, heat and carbon monoxide, are of minor significance.

Allocation of Vital Statistics

Allocation of births, deaths, and communicable disease cases to the place of residence will be carried out for the first time in the 1935 annual report of the Bureau of Records and Statistics which has just been sent to the printer. This new policy is in accord with that followed by the Federal Bureau of the Census and will make for a more logical basis for comparison of such statistics. No longer will the presence of a large hospital increase the death rate of a municipality when those deaths should be charged to surrounding counties.

Growing legal importance of birth and death records has brought about a coöperative reciprocal exchange of such records between states, the Bureau of Records and Statistics reports. Forty other states and Canada exchanged 1,600 such registrations with Michigan during the past year. There were 592 deaths of Michigan residents reported outside the state last year and 264 births. This voluntary exchange of records will greatly simplify the search for them which has been necessitated in the past.

Births Decrease After 1935 Rise

An increase of 3,459 births and a rise in the birth rate from 16.48 to 17.21, last year, placed Michigan among a very select group of nine states reporting rising birth rates, but statistics to Sep-

tember 1 of this year indicate that this increase was but temporary.

A two per cent decrease in births has been recorded in comparison with the same period of 1935. The state is running 1,271 behind last year's total of 59,816 births at the above date. It now appears that the 1935 total of 87,403 births will not be reached this year.

Michigan's total births have never quite reached 100,000, but they came very close to that figure during the record year of 1927, when 99,940 births were registered with a rate of 22.26. The highest rate ever recorded was 26.22 in the war year of 1917. Total births have decreased one-eighth in the past decade and birth rate dropped almost one-fourth.

Industrial Hygiene Problems In the United States

R. R. Sayers, Washington, D. C. (*Journal A. M. A.*, July 4, 1936), asserts that the objective of industrial hygiene, in addition to the control of specific occupational diseases, is to reduce the incidence in occupational increase in those diseases common to adults in general. In its scope industrial hygiene is nearly as broad as preventive medicine. Since 1917, the U. S. Public Health Service, in coöperation with a number of industries, has been analyzing and reporting on the frequency of sickness causing disability of more than a week among approximately 160,000 male workers. In ascertaining the effect of occupation on the health of workers in dusty trades, it was found that the incidence of respiratory diseases was about three times as great in granite cutting as in general manufacturing, and that the rate of pulmonary tuberculosis was about forty times as great. At present, industry does not possess data concerning the incidence of specific diseases for given ages, according to sex and by geographic areas, correlated with occupations. In the absence of definite industrial morbidity and mortality statistics, some conception of the extent of the problem may be secured by a preliminary survey or study of the industrial establishment or establishments by one trained in industrial hygiene engineering. The information obtained in such a study must not be interpreted as indicating in any manner that an exposure to an industrial condition or material necessarily implies injury to a workman but merely indicates the potentialities of the situation. Such preliminary data, however, do not give quantitative information as to exposure from the point of view of possible systemic poisoning. This is determined by medical and engineering studies. The engineering methods include isolation of the hazardous processes; ventilation, general and exhaust locally; and personal protective devices, such as respirators, canister type masks, fresh air or hose type masks, protective clothing, suitable bathing facilities, and good house-keeping within the plant. This last is a most important control measure in industrial hygiene and is included in the industrial sanitation codes in many states in the Safety Code for Industrial Sanitation in Manufacturing Establishments, approved by the American Standards Association and sponsored by the United States Public Health Service. The medical control for the protection of the health of the industrial worker depends on knowledge of the industry and of the occupation and activities within each occupation, and physical examination of all persons, especially those exposed to substances or conditions hazardous to health. Through the establishment of bureaus of industrial hygiene, mutually acceptable to the employer, employee, medical profession and other interested state departments, the life of the industrial worker may be materially prolonged.

General News and Announcements

The First 100% Society for 1937!

Muskegon County Medical Society, composed of 70 members, has already gone over the top in two respects:

1. The first County Medical Society to pay 1937 dues for its members.
2. The first County Medical Society to join the 100 per cent club for 1937.

Congratulations to the first 100 per cent component County Medical Society in the New Year.

Dr. H. G. Palmer, physician and surgeon, formerly of Detroit, Michigan, has moved to St. Petersburg, Florida, and has opened an office there.

Use the Executive Office of the Michigan State Medical Society, as it is maintained to be of service to you. When in Lansing, drop in at 2020 Olds Tower. This is *your* office.

1937 as a Legislative Year.—The Legislature convenes in regular session, January 6, 1937.

One hundred Representatives and thirty-two Senators, representing all the counties of the State.

If your County Medical Society desires a speaker for one or more of its meetings, contact the Executive Office of the State Society, 2020 Olds Tower, Lansing. Please give at least two weeks' notice.

"State Society Night" was held by the Grand Traverse-Leelanau-Benzie County Medical Society in Traverse City on December 1. The officers of the Michigan State Medical Society were the honored guests.

Dr. Dean Lewis of Baltimore, Maryland, writes concerning the Detroit Convention of the Michigan State Medical Society: "I thought you had a wonderful meeting of the Michigan State Medical Society, and I had a delightful time in Detroit."

The Bruce Publishing Company of Saint Paul was the donor of 3,000 special notebooks for the convenience of physicians registering at the Detroit Convention of the Michigan State Medical Society in September, 1936. Thanks is extended to the publishers of *THE JOURNAL* for this useful gift.

Did you notice the new format of the fifty-four county societies, branches of the Michigan State Medical Society, which appears on pages xvi and xvii. The list includes the names and addresses of the President and Secretary, and also the meeting dates of the component county medical societies of Michigan.

The names of the advertisers in this issue of *THE JOURNAL* are listed for your convenience on page xxviii. The products of these advertisers are recommended to you because we believe the firms are thoroughly trustworthy and responsible. Further, the advertisement of a medical or chemical preparation in *THE JOURNAL* is not accepted unless it is one

that has been approved by the Council of Pharmacy and Chemistry of the A.M.A.

"Who Wants Socialized or State Medicine!" The Richmond County Medical Society, Staten Island, New York, has written for 300 copies of the brochure, "Who Wants Socialized or State Medicine!"

The St. Louis Medical Society has inquired concerning 4,000 copies for distribution to the membership of the Missouri State Medical Society.

At the post-graduate conferences conducted by Dr. Alexander M. Campbell, Grand Rapids, Chairman of the Maternal Health Committee of the State Society, which "refresher" courses on Obstetrics were arranged by the State Health Departments as a Social Security project, the average attendance was 61 physicians and 68 nurses. The lectures were given once per week in Traverse City, Petoskey, Alpena, and Grayling and continued for six weeks.

The Saginaw County Medical Society invited to its meeting of October 27 several officers of the Michigan State Medical Society for a discussion of medico-economic problems. Guests who addressed the Society were Dr. P. R. Urmston, Bay City, Chairman of The Council; Dr. W. E. Barstow, St. Louis, Councilor of the Eighth District; Dr. L. Fernald Foster, Bay City, Secretary; Dr. L. G. Christian, Lansing, Chairman of the Legislative Committee; and Executive Secretary Wm. J. Burns.

The Secretaries Conference held at the A. M. A. headquarters in Chicago on November 16-17 was attended by some one hundred and fifty representatives of State and County Societies of the Union. Among those registering from Michigan were Chairman of The Council Dr. P. R. Urmston, Bay City; Councilor F. T. Andrews, Kalamazoo; Secretary L. Fernald Foster, Bay City; Editor James H. Dempster, Detroit; Past President L. J. Hirschman, Detroit; Executive Secretary Wm. J. Burns, Mr. L. Leet of the Executive Office staff, and Mr. J. A. Bechtel, Acting Executive Secretary of the Wayne County Medical Society.

A few more of your friends who entered technical exhibits at the Detroit Convention of the Michigan State Medical Society in September, 1936, included:

The DeVilbiss Company, Toledo, Ohio.
The Do/More Chair Company, Elkhart, Indiana.
Dy-Dee Wash, Inc., Detroit, Michigan.
Encyclopædia Britannica, Detroit, Michigan.
H. G. Fischer & Company, Chicago, Illinois.
General Electric X-Ray Corporation, Detroit, Michigan.
Gerber Products Company, Fremont, Michigan.
Hack Shoe Company, Detroit, Michigan.
Hanovia Chemical & Manufacturing Company, Newark, N. J.
The J. F. Hartz Company, Detroit, Michigan.

AN IDEAL GIFT FOR A PHYSICIAN
is

THE MEDICAL HISTORY
OF MICHIGAN

Two Volumes . . . Five Dollars

Orders received at 2020 Olds Tower, Lansing.

Dr. J. D. Brook of Grand Rapids, former president of the Michigan State Medical Society, was elected president of the Michigan Public Health Conference on November 12, at the annual meeting in Lansing. Other officers elected are: Dr. Frank A. Poole of Saginaw, vice president; Miss Marjorie Delavan of Lansing, secretary and treasurer; Dr. C. C. Slemmons, State Health Commissioner, representative on Governing Council of the American Public Health Association, and Dr. V. K. Volk of Saginaw; Miss Louise Knapp of Detroit, and Herbert Hasson of Paw Paw, directors.

A Directory of Members of the Michigan State Medical Society will be published in the May, 1937, issue of *THE JOURNAL*, Michigan State Medical Society. The names of members in good standing as of April 15, 1937, will be published in this roster. This is the first time an index of members of the Michigan State Medical Society has been published in *THE JOURNAL*. The Executive Committee of The Council of the Michigan State Medical Society has voted to make this directory of members an annual publication.

Dr. McLean Honored

Dr. Angus McLean of Detroit was tendered a complimentary banquet at the Hotel Statler on Armistice night. About five hundred persons were present, consisting of members of the medical profession, of the school men's club of Detroit, the legal profession, and many others. Dr. James W. Inches, an old friend of Dr. McLean's, well known to the medical profession of the state, acted as toastmaster. Mr. Frank Cody, superintendent of the Detroit Public Schools and president of Wayne University, in a brief address, paid tribute to Dr. McLean, who has been for over twelve years a member of the Detroit Board of Education. Among other speakers was police commissioner Pickert of Detroit, who paid high tribute to Dr. McLean as a soldier and organizer of Harper Hospital Base No. 17, overseas unit. The occasion of the banquet was the conferring upon Dr. McLean of the Order of the Crown of Italy by the Italian Consul Chevalier Enrico G. Belcredi. This *JOURNAL* congratulates Dr. McLean on this additional honor to those he has received from several European countries.

Members should be cautious about rendering medical or surgical care for injuries referred by WPA foremen or others under the impression that fees will be paid by the U. S. Employees' Compensation Commission. The act of February 15, 1934, which is applicable to certain persons employed on projects financed from funds provided by the ERA of 1935, provides compensation only for *traumatic injuries sustained while in the performance of duty*. It further provides that traumatic injury shall mean only injury by accident causing damage or harm to the physical structure of the body and shall not include disease in any form except as it shall naturally result from an injury.

Several instances have been reported in which a foreman referred a case for treatment to a physician and the bill for services was rejected by the Compensation Commission on the grounds that the injury was not traumatic or that it did not result

from accident. *In such cases no recourse is open to the physician.*

It would appear, therefore, that members would be justified in demanding payment or satisfactory credit arrangements for all cases that do not beyond a reasonable doubt fall within the provisions of the act.

Crippled and Afflicted Child Commitments For October, 1936

Crippled Child:

New cases	133
Renewals	93
Discharged	3
	<hr/> 229

Of the total number 70 went to the University Hospital and 159 went to miscellaneous hospitals. From Wayne County (included in total of 229):

New cases	54
Renewals	35
Discharged	1
	<hr/> 90

Of the total number 4 went to the University Hospital and 86 went to local hospitals.

Afflicted Child:

Total of 1076.

Of the total number 238 went to the University Hospital and 838 went to miscellaneous hospitals. From Wayne County (included in total of 1076):

Total of 326.

Of the total number 33 went to the University Hospital and 293 went to miscellaneous local hospitals.

Afflicted Child Law: The State pays for everything except transportation and does not recharge any of the items paid by the State back to the county. The State pays the hospital rate, the physician's fee (except at the University Hospital where the physician is already on salary), the physician's examination fee of \$3.00 and the fee of the county agent for his investigation (economic investigation). The transportation is paid by the county.

There are a few exceptions: Venereal cases, in which the State pays for the first 15 days' expenses, and beyond that the balance is charged back to the county; advanced cases of tuberculosis, in which the State pays 75c per day toward the cost, and the remainder is charged back to the county; custodial cases, where the child is in the hospital for a long period, where particular arrangements are made by the Auditor General's Office and the Crippled Children Commission with the county to take care of expenses of each individual case—no standard set fee or rule; maternity cases sent to the hospital some time in advance of delivery—again an individual arrangement is made between the state officials and the county officials, as this time element varies.

Crippled Child Law: The above holds true for the crippled child, especially in the exception concerning custodial care.

Afflicted Adult Law: The county pays for everything. The only exception is in the case of the University Hospital which bills the State for afflicted adults, and the State recharges the bill back to the county. This is only a matter of bookkeeping. The sum of \$5 is allowed for the medical examination of afflicted adults.

The Crippled Children Commission has nothing to do with the administration of the Afflicted Adult Act.

Crusade Against Tuberculosis

Dr. Henry Vaughan, Commissioner of Health, Detroit, called together a number of prominent industrialists and professional men of Detroit to a luncheon given by Mr. Klare, manager and vice president of the Hotel Statler. The purpose of the meeting was to inaugurate the tuberculosis drive sponsored by the Department of Health, the Wayne County Medical Society, local tuberculosis organizations, and the *Detroit News*. Dr. Vaughan presided. An interesting feature following the dinner was a prebroadcast by radio station WWJ of a dramatized act which was later broadcast in the evening by WWJ. Among the guests present were Dr. J. H. Upham, president-elect of the American Medical Association, and Dr. Thomas Parran, Surgeon-general of the United States Public Health Service. Dr. Parran was called upon for a short address in which he complimented Detroit on its success in regard to diphtheria prevention. Further he said:

"Detroit has pointed the way in the application of scientific knowledge in its automobile industry, and also is doing so in the application of medical scientific knowledge in eradicating the modern plagues that menace mankind.

"The whole country points to what Detroit has done through its Health Department and doctors, and of that you can be justly proud."

He pointed out that one of the brightest chapters in the history of the past century has been the disappearance of many diseases.

"There are modern plagues, such as tuberculosis, syphilis, pneumonia, cancer and malnutrition, which are insidious but can be brought under control."

"We are about to inaugurate social insurance and old-age pensions," he added, "to help make the declining years of our people more comfortable and enjoyable by giving them some economic security, and it is just as practical to spend some money to prevent some of the causes of illness which mar the enjoyment of old age."

Organization Meeting of M.S.M.S. Committee Chairmen

An organization meeting of the Chairmen of all Committees of the Michigan State Medical Society with the Executive Committee of The Council was held at the Olds Hotel, Lansing, on November 11, 1936.

The integration system of the State Society was explained by Secretary L. Fernald Foster, and the Chairman of each Committee outlined the program of his group for the ensuing twelve months. President H. E. Perry presided at this conference, which was attended by Drs. Henry Cook, President-Elect, Flint; Wm. A. Hyland, Treasurer, Grand Rapids; F. E. Reeder, Speaker, Flint; P. R. Urmston, Chairman of The Council, Bay City; T. F. Heavenrich, Vice Chairman of The Council, Port Huron; A. S. Brunk, Councilor, Detroit; Henry Carstens, Councilor, Detroit; Wilfrid Haughey, Councilor, Battle Creek; F. T. Andrews, Councilor, Kalamazoo; I. W. Greene, Councilor, Owosso.

Dr. L. G. Christian, Lansing, Chairman of Legislative Committee

Dr. B. R. Corbus, Grand Rapids, Chairman of Joint Committee, Public Health

Dr. R. H. Pino, Detroit, Chairman of Economics Committee

Dr. O. A. Brines, Detroit, Chairman of Cancer Committee

Dr. L. O. Geib, Detroit, Chairman of Preventive Medicine Committee

Dr. A. M. Campbell, Grand Rapids, Chairman of Maternal Health Committee

Dr. L. Fernald Foster, Bay City, Chairman of Public Relations Committee

Dr. H. H. Cummings, Ann Arbor, Chairman of Special Contact with Government Agencies and Allied Groups

Dr. H. A. Luce, Detroit, Chairman of Mental Hygiene Committee

Dr. T. K. Gruber, Eloise, Chairman of Liaison with Hospitals

Dr. A. F. Jennings, Detroit, Chairman of Liaison with Bar Association

Dr. F. B. Burke, Chairman of Ethics Committee.

Drs. L. J. Hirschman, Detroit; S. W. Insley, Detroit; Mr. Clare Gates, Ann Arbor; A. L. Callery, Port Huron; and Wm. J. Burns, Executive Secretary.

Absent:

Dr. Florence Ames, Monroe, Chairman of Advisory Committee, Women's Auxiliary

Dr. Fred H. Cole, Detroit, Chairman of Radio Committee

Dr. J. D. Bruce, Ann Arbor, Chairman of Advisory Committee on Postgraduate Education.

The coöperation of the Michigan State Medical Society in the administration of the maternal and child health program by the Michigan Department of Health through the Bureau of Child Hygiene and Public Health Nursing was expressed by members of the society meeting Wednesday, September 16, with representatives of fourteen other professional organizations as a permanent advisory committee on maternal and child health with Dr. Lillian R. Smith.

This committee will aid in outlining methods for the improvement of maternal and child health in Michigan with funds made available under the provisions of the Social Security Act. Representatives of the State Medical Society in attendance included Dr. Grover C. Penberthy, Dr. Henry Cook, Dr. L. O. Geib, Dr. C. T. Ekelund, and Mr. William J. Burns, executive secretary.

Dr. Smith outlined the present scope of the program and declared that one of the major objectives of the Department had virtually been accomplished with the provision of a public health nurse in every county in the state with the single exception of Lenawee. These nurses, sponsored either by the state or local health departments, carry on their educational work in coöperation with the local county medical society. The response of physicians and lay people to this service has been most gratifying, Dr. Smith declared, and increasing demands for this service may make further expansion a necessity.

The postgraduate courses in obstetrics conducted by Dr. Alexander M. Campbell, chairman of the maternal health committee, were commended by Dr. Penberthy as a fine opportunity for physicians in the vicinity of Traverse City, Petoskey, Alpena and Grayling. It was suggested that a similar course in pediatrics be provided soon.

"The real objective of this entire program," said Dr. Henry F. Vaughan, Detroit Health Commissioner, "is to make use of the facilities now dormant and latent in every community for the development of a concise and definite program for the preservation of the health of mothers and children in Michigan."

Members of the advisory committee present included Dr. F. B. Miner and Dr. R. M. Kempton of the American Academy of Pediatrics; Dr. G. M. Byington, Kellogg Foundation; Dr. L. O. Schontz, Emergency Relief Administration; Dr. C. C. Slemmons, State Health Commissioner; Dr. William R. Davis, State Dental Society; and Miss Edna L. Hamilton, Children's Fund of Michigan.

Other organizations represented included the Michigan League of Women Voters, Michigan Child Study Association, Michigan State Grange, Michigan Tuberculosis Association, Department of Public Instruction, Michigan Crippled Children Commission, and the Michigan State Nurses' Association.

Ingham County State Night

Ingham County started off the year with a "state night" at Lansing on November 10. Dr. Earl I. Carr, president of the society, presided. After a splendid dinner, a program was presented as follows: Dr. H. E. Perry, president of the Michigan State Medical Society, was introduced and, in a brief address, spoke on the subject "Our Present Objective." Dr. Henry Cook, president-elect, followed with "Our Aims for the Immediate Future." Dr. Paul R. Urmston, president of the council, spoke on "The Activities of the Council and the Duties of Each Councillor." Dr. Frank E. Reeder, speaker of the House of Delegates, took for his subject "Special Order of Business." Dr. L. Fernald Foster, newly elected secretary, spoke on the subject of "Greater County Society Activity and Organization," stressing the importance of county society organization. William J. Burns, executive secretary, told the audience what was doing in a brief snappy speech.

"The Changing Times in Medicine" was the subject of the guest speaker, Dr. John H. Upham, Columbus, Ohio, president-elect of the American Medical Association. Dr. Upham referred to his own early career as a student and as interne at Johns-Hopkins Hospital. He spoke of the wonderful skill of the men of the eighties and nineties, who could make diagnosis without the aid of numerous later improvements which are now depended upon in medicine. Careful case histories and close questioning by men of forty years ago enabled them to dispense with what physicians of today consider a necessity.

It was difficult to forecast the future of medicine. We are certainly living in changing times. He felt it important that physicians should keep pace with the latest developments of their profession. Referring to the report of the committee on the cost of medical care, he thought that just as good a one could have been written before the investigation was started and a million dollars might have been spared. The report, as is well known, endeavored to place the burden of the cost of medical care on the doctor, whereas he was only a small factor in it. The patients receive benefit today of all recent developments in medical science, but in many instances are not willing to pay for it. He felt that the hospitals might have been less luxurious and thereby lessened the expense of medical care. The medical profession should endeavor to control the situation. The social worker, nurse, technician, should all be utilized by the doctor, but should not control him. Dr. Upham said that in his travels through the United States, he was impressed with the earnestness of groups of physicians for advancement in their profession, whether the groups be large or small.

Guests attending the special meeting of November 10 were:

Wilfrid Haughey, *Battle Creek*; L. Fernald Foster and P. R. Urmston, *Bay City*; A. S. Brunk, F. B. Burke, Henry R. Carstens, J. H. Dempsey, L. O. Geib and Louis J. Hirschman, *Detroit*; J. B. Bradley and A. G. Sheets, *Eaton Rapids*; Henry Cook, H. E. Randall and Frank E. Reeder, *Flint*; E. A. Schilz, *Grand Ledge*; Burton R. Corbus and V. M. Moore, *Grand Rapids*; C. R. Keyport and Stanley A. Stealy, *Grayling*; Robert B. Harkness, *Hastings*; Edw. D.

Crowley, Charles R. Dengler, J. J. O'Mara, H. W. Porter and Phil Riley, *Jackson*; F. T. Andrews and John B. Jackson, *Kalamazoo*; H. E. Perry, *Newberry*; I. W. Greene, *Owosso*; F. A. Baker, *Pontiac*; A. L. Callery and T. F. Heavenrich, *Port Huron*; Dean W. Hart, *St. Johns*; W. E. Barstow, *St. Louis*; and J. H. J. Upham, *Columbus, Ohio*.

Wayne County Campaign Against Tuberculosis

Those who have read the *Detroit News* during the early part of November are aware of the campaign for the suppression of tuberculosis. The *News* has given the matter extensive publicity in articles written by Dr. Paul de Kruif and Mr. A. M. Smith of the *Detroit News* staff. Not only had this campaign been pursued vigorously in print, but the radio has, likewise, been pressed into service. The campaign is being carried on with the full co-operation of the Detroit Department of Health, the Wayne County Medical Society and the *Detroit News*, as well as a large number of prominent business men in Detroit.

During the past several years, the Wayne County Medical Society, in co-operation with the Detroit Department of Health and other agencies, has supported a number of tuberculosis case finding campaigns. It is intended, however, that the present undertaking should not be a short time campaign but should be a long term program to eradicate tuberculosis. It is being undertaken in the same manner as the diphtheria protection program. We are assured of the hearty co-operation of many professional and lay groups. In the forefront is the *Detroit News*, where a series of special articles on tuberculosis were published for twelve consecutive days beginning Monday, November 9, preceded by a feature story on Sunday, November 8, outlining the progress made in the control of diphtheria. Also beginning on November 9, there was, for each of twelve days, a five minute dramatization of tuberculosis on Station WWJ. In addition to all of this, there was also a thirty minute program on WWJ, beginning November 11, at 7:30. These dramatizations will be broadcast each week at the same hour for an indefinite period.

It is the aim of this program to discover tuberculosis in its earliest stage and to provide advice and supervision so as to prevent the development of advanced tuberculosis. Minimal pulmonary tuberculosis can be discovered best by the use of the tuberculin test and x-ray examination of the chests of the positive reactors.

The groups to be included in the examinations for which the Health Department will make payment (when the patient cannot) are:

- (a) The immediate contacts to known cases of tuberculosis, whether residing in the same family unit or not;
- (b) Those persons whose history or appearance lead the physician to suspect tuberculosis.
- (c) All individuals residing in certain areas of the city where the tuberculosis mortality is known to be high.

The Wayne County Medical Society has appointed a special Committee on Tuberculosis. Such committee will work directly with the Health Department and other interested groups.

The Detroit Department of Health has appointed Dr. G. M. Byington, Director of Medical Relations. He will make his headquarters with Dr. Bruce Douglas at the Herman Kiefer Hospital and may be reached by calling TRinity 2-1542.

A series of postgraduate conferences on tuberculosis has been held in the auditorium of the Herman Kiefer Hospital. Four sessions were devoted to the subject of tuberculosis.

Approximately 300 Detroit physicians are on the list of cooperating physicians who manifested an interest in tuberculosis work two years ago. We want to know whether you wish your name continued on this list.

When, in the judgment of the cooperating physician, the family cannot pay for the tuberculin test, the Health Department will pay the physician \$1 for the tuberculin test, including the reading of the result, and also \$1 for the consultation and advice to the patient in all cases which have been x-rayed, providing the physician reports his tuberculin tests and final report on positive cases to the Department of Health on the cards provided for that purpose.

This part of the program was under the supervision of the Detroit Roentgen Ray Society in co-operation with the Wayne County Medical Society and the Detroit Department of Health.

Where the examining physician does not provide an x-ray service in his own office, all such examinations are referred to one of a group of cooperating roentgenologists.

A list of cooperating roentgenologists has been prepared by the Detroit Roentgen Ray Society and is limited to specialists in this field. A special committee has been appointed to examine all doubtful and positive films taken either by physicians or special roentgenologists, and the committee's final judgment will be submitted to the examining physician. Such films should be sent to Dr. Bruce Douglas, at the Herman Kiefer Hospital.

The cooperating roentgenologists take a flat plate of the chest of the positive reactors and submit a written report to the cooperating physician. When the cooperating physician has indicated that the family cannot pay for this service, the roentgenologists will be reimbursed by the Department of Health at the rate of \$3 per examination, providing, of course, that the proper report has been made to the Department of Health.

In order that there may be provided some measurement of the success of this program, records are essential.

•

State Secretaries and State Editors Meet in Chicago

As has been the custom for many years, the secretaries of various state medical societies throughout the United States, as well as editors of medical journals, where the office of editor and secretary are not performed by one person, proceeded to Chicago at the invitation of the American Medical Association to discuss matters of common interest to the medical profession, subjects that are non-technical in nature, but concern the social and economic interests of the profession. The program for November 16, 1936, at the new headquarters of the American Medical Association was as follows: Dr. Rock Sleyster, chairman of the Board of Trustees of the American Medical Association, called the meeting to order and, in doing so, read a very interesting résumé of the history of the American Medical Association with particular reference to the expanding of the head office. The American Medical Association has been unusually successful and has found it necessary in its attempts

to meet the growing demands of the medical profession, from time to time, to enlarge its headquarters. At the present the new building occupies the entire site at 535 North Dearborn Street; it is nine stories high. On the ninth story is an up-to-the-minute auditorium. Dr. Earl Whedon of Sheridan, Wyoming, was appointed chairman and acted in his usual efficient capacity. The meeting was then addressed by Dr. Charles Gordon Heyd, president of the American Medical Association. Dr. Heyd spoke on the subject of "The History of Medicine." "The Basic Science Laws" was the subject of an address by Mr. J. W. Holloway of the Bureau of Legal Medicine and Legislation of the American Medical Association. Mr. Holloway commented on the movement for enactment of the Basic Science Laws, showing the effect of these laws in ten or eleven states which had already adopted them. The Michigan Filter System was the subject of an address by Dr. L. F. Foster, secretary of the Michigan State Medical Society. Dr. Foster described the origin, the necessity and the working out of the Michigan Filter System. This was Dr. Foster's first appearance before the annual conference of secretaries. He gave a very fluent address of twenty minutes' duration which, to use the somewhat hackneyed expression, went over well. There were many favorable comments on Dr. Foster's address. Dr. Glenn Myers of Los Angeles spoke on the "Public Health League of California." This aggregation or group, Dr. Myers went on to say, is political, but it is non-partisan. Its object is to inform the legislators or prospective legislators of the nature and importance of proposed health legislation. The organization consists not only of physician members, but also members of allied callings such as pharmacy or nursing. The Public Health League has been found to work satisfactorily in California.

The Conference adjourned for luncheon, at the Medinah Temple, to reassemble at two o'clock when the opening address was made by Dr. J. H. J. Upham, president-elect of the American Medical Association. Dr. Upham, who was a recent visitor to Michigan, spoke of having made a tour of ten states of the union, during which he visited a great variety of medical societies, some in industrial centers, some in rural parts of the country, some in very large and some very small in number. He was impressed by the earnestness of the medical profession in the endeavor to keep their mental equipment up to date. Refresher courses and postgraduate courses have come to be almost the order of the day. Dr. Upham said he observed a great tendency on the part of county societies to have a preponderance of guest speakers on their programs. He thought that in many instances this was carried too far, since it did not give the local men any opportunity for self-expression. Speaking of the personnel of the American Medical Association, Dr. Upham advised that a great many who were members only, should become fellows of the Association.†

Dr. Thomas Parran, Surgeon General of the United States Public Health Service, was the guest speaker at the conference. Dr. Parran discussed at length the United States Public Health Service and Social Security Act. Among other things, he stated very emphatically that his department has no intention or desire to invade or to regiment the private practice of medicine; that his interests lie

†We pass this on to any member of the Michigan State Medical Society who may read this. A fellowship in the American Medical Association calls for a special application for fellowship together with a fee of seven dollars a year which also includes a subscription to the *Journal of the American Medical Association*.

wholly in the matter of preventive medicine, and in encouraging the preventive idea among all states in the union. Miss Katharine F. Lenroot, Chief of the Children's Bureau of the United States Department of Labor, talked at length on the Children's Bureau and the Social Security Act.

Dr. Richard M. Hewitt of the Mayo Clinic gave a very interesting illustrated talk on the preparation of manuscripts for lantern slide illustrations. He showed that in order to produce the best lantern slides, one should avoid putting too much printed matter on each slide.

Following dinner at the Palmer House, the editors of the state journals, together with the secretaries and guests, assembled to discuss matters which constitute the problems of the medical journal. Dr. Holman Taylor, secretary-editor of the Texas State Medical Association, presided. Without going into detail, the gist of the discussion was in effect that advertisements for alcoholic liquors were not favored by the *Journal of the American Medical Association* and the majority of state journals. The printing of professional cards was left to the option of the various states, no general rule. Physicians should be careful in regard to lending their names to irresponsible publications which exploit advertising matter not acceptable to professional standards.

The Tuesday forenoon session was given over to a discussion on "Insurance Against Alleged Malpractice," by Mr. Thomas V. McDavitt, of the Bureau of Legal Medicine and Legislation of the American Medical Association, as well as the subject of "The Scientific Exhibit at Annual Meetings of State Medical Associations," discussed by Mr. Thomas G. Hull, director of the Bureau of Exhibits of the American Medical Association.

Each of the subjects was discussed by the various members as extensively as the time would permit.

The Auld Doctor

Did ye ken oor auld Doctor MacTavish
Wha lived doon th' road by th' kirk,
Wha's swearin' wis th' height o' his language
As he plodded alang in th' earth?

When he bought an auld auto tae ride him
As he ca'd on th' sick an' th' lame;
Sometimes he wis seen comin' hame on th' rim,
Bit th' swearin' wis a'ways th' same.

Hooever there wis something aboot him
When th' language he used didna coont,
His hert wis sae big an' fu' tae th' brim
Wi' kindness o' muckle amoot.

Tae vaccinate bairnies he'd beguile
Them wi' stories sae funny an' pert,
He'd open a boil wi' a hypnotic smile,
Ye'd wonder if it really did hurt.

He'd pat th' wee airm o' auld Granny
A' bent an' bow'd doon wi' th' pain,
He'd come tae th' poor or th' mighty
In sunshine, in cauld or in rain.

God bless th' auld Doctors MacTavish
Wha live doon th' road by th' Kirk,
May they hae some praise i' oor language
Afore they pit doon in th' earth.

WEELUM.

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column and this will be deemed by us a full compensation to those sending them. A selection will be made for review, as expedient.

PHYSICIAN, PASTOR AND PATIENT. By George W. Jacoby, M.D., Past President of the American Neurological Association and the New York Neurological Society. Illustrated. Paul B. Hoeber, Inc., Medical Book Department of Harper & Brothers, New York. 1936. Price, \$3.50.

Physician, Pastor and Patient is a book dealing with a general theme, not essentially medical. It occupies itself with the relation of religion to medicine, or the physician and the clergyman, using this term in its broadest sense. The author is, himself, a neurologist and, therefore, by training well qualified to deal with the subject which concerns itself with the human side of medicine. He writes entertainingly on such subjects as the following: "The Physician's Calling," "Religion and the Patient," "Vital Problems Confronting Physician and Clergyman," and, fourthly, "Where Medicine and Religion Join Hands in Everyday Life." In these various sections are discussed a great variety of subjects such as "Superstition, the Mother of Medicine and Religion," and "The Survival of Superstition," "Contraception and Artificial Abortion," the subject of birth control and sex and sex education, the euthanasia problem, the subject of professional secrecy and many others. There are twenty full page illustrations, more or less historical in character. The author has succeeded in introducing a book that will appeal to a wide range of readers.

TOXICOLOGY, OR THE EFFECT OF POISONS. By Frank P. Underhill, Late Professor of Pharmacology and Toxicology, School of Medicine, Yale University. Thoroughly revised by Theodore Koppanyi, Ph.D., Professor of Pharmacology and Materia Medica, Georgetown University, School of Medicine. Third Edition, Philadelphia: P. Blakiston's Son & Co., Inc., 1936.

This is a concise, yet adequate treatise on the subject which any practitioner would do well to have in his library. The author has made the information quickly available by the arrangement of the substances in order according to their chemical nature. He gives the physical and chemical properties of poisons so that they may be the more easily identified. A discussion of the usually fatal dose and of the fatal period gives information that is necessary for one to undertake, intelligently, the treatment of such cases. The toxicologic action of the substance, together with the findings at autopsy in fatal cases, is given. A detailed portrayal of the symptoms in both acute and chronic poisoning gives the doctor a rational basis upon which to consider treatment. The general and the specific antidotal treatment is given in sufficient detail, so that it can be easily and quickly acquired in case it is not already in mind.

WHY BRING THAT UP; A GUIDE TO AND FROM SEASICKNESS. By Dr. J. F. Montague, Editor of the Health Digest, Home Health Library, New York.

The sub-title indicates, more accurately, the subject-matter of this little book. Dealing with a *grave* subject, the author maintains a more or less facetious attitude throughout. His treatment of seasickness is told in a paragraph or two. This statement, however, does not do justice to the book. It deserves to be read through—every word of it. The illustrations are very apt and the color of the cover and the paper on which the book is printed

smack of the sea. In fact, the reader may undergo a vicarious experience of the armchair variety of mal de mer as he peruses the little volume. It is recommended.

A TEXTBOOK OF OBSTETRICS. By Edward A. Schumann, A.B., M.D., F.A.C.S., Professor of Obstetrics, School of Medicine, University of Pennsylvania; Surgeon-in-Chief, Kensington Hospital for Women; Gynecologist and Obstetrician to Philadelphia General and Memorial Hospitals; Obstetrician to Chestnut Hill Hospital; Consulting Gynecologist to Frankford, Jewish, Burlington County and Rush Hospitals. 780 pages with 581 illustrations on 497 figures. Philadelphia and London: W. B. Saunders Company, 1936. Cloth, \$6.50 net.

This work embodies the most recently accepted practices. The author has accomplished simplicity in the presentation of his subject both by description and well chosen illustrations. The book is ideal as a textbook on obstetrics, giving, as it does, the essentials of the subject in fewer than 800 pages. It is a book for the student and general practitioner rather than the specialist in the subject.

A TEXTBOOK OF PHYSIOLOGY FOR MEDICAL STUDENTS AND PHYSICIANS. By William H. Howell, Ph.D., M.D., Sc.D., LL.D., Emeritus Professor of Physiology in the Johns Hopkins University, Baltimore. Thirteenth Edition, Thoroughly Revised. 1150 pages with 308 illustrations. Philadelphia and London: W. B. Saunders Company, 1936. Cloth, \$7.00 net.

Previous editions of this text have been read by many physicians and medical students. This thirteenth revision bids fair to be read by many more. The author has presented his material clearly and concisely, without either obscuring the essence of his discussion with detailed minutiae, or sacrificing completeness in the interest of comprehensiveness—a factor to be appreciated by physician and beginning student alike. The book is written to be readily understood. The contents include sections on the physiology of muscle and nerve; the central nervous system; the special senses; blood and lymph; the organs of circulation of blood and lymph; respiration; digestion and secretion; nutrition and thermal control; and of the reproductive system. The diagrams and illustrations are numerous. On points involving opposing theories, the author states the issues and invites the student to make his own conclusion. The references to many recent research findings, particularly in the chapters on the endocrine system and vitamins, coupled with several historical résumés, reveal the tendencies in physiology and aid the reader to form a concept of the progressive aspect of this science.

ORAL DIAGNOSIS AND TREATMENT PLANNING. A Text for the Dental Student, A Reference Book of the Practitioner and Medical Student. By Kurt H. Thoma, D.M.D., Charles A. Brackett, Professor of Oral Pathology in Harvard University; Oral Surgeon to the Brooks Hospital, Consulting Oral Surgeon to the New England Baptist Hospital; Consulting Oral Surgeon to the Tumor Clinic of Beth Israel Hospital. With 533 illustrations, 71 of them in colors. Philadelphia and London: W. B. Saunders Company, 1936.

This is a textbook on the technics of examination, diagnosis and treatment planning designed for use by the physician, dentist or medical student. It is intended to correlate for the student and practitioner the results of their examinations with the characteristics of unknown or uncommon lesions. Although this work is not intended as a text on pathology, it is a rather complete review of the latest accepted facts on the etiology, symptomatology, pathologic development, and histologic changes of dental and oral diseases. Divided into three parts, the book discusses (1) the theory of diagnosis and

treatment planning, (2) special methods of examinations, oral and general, and (3) the special diagnosis of dental and oral diseases.

THE RELIEF OF PAIN. A Handbook of Modern Analgesia. By Harold Balme, M.D. (Durh.), F.R.C.S. (Eng.), D.P.H. (Lond.); Formerly Professor of Surgery and Dean of the School of Medicine, Chee-loo University, China. With an Introduction by Sir E. Farquhar Buzzard, Bt., K.C.V.O., LL.D. (Man.), M.D. (Oxon.), F.R.C.P., Regius Professor of Medicine in the University of Oxford. President-Elect of the British Medical Association, 1936-37. Philadelphia: P. Blakiston's Son & Co., Inc. (1012 Walnut Street), 1936.

This work is concerned primarily with the nature of pain, its diagnostic significance and methods for its relief. It is not intended to be a short cut to palliative treatment but rather to assist careful and accurate diagnosis—diagnosis aided and guided by the light which pain so often sheds upon the processes of disease. The author first takes up the nature and characteristics of pains, general and systemic pain, and various types of pain classified according to the region of occurrence. The final part is concerned with the therapeutics of analgesia.

THE 1936 YEAR BOOK OF RADIOLOGY: Diagnosis, edited by Charles A. Waters, M.D., Johns Hopkins University and Hospital; Therapeutics, edited by Ira L. Kaplan, M.D., Director, Division of Cancer, Department of Hospitals, N. Y. C. Chicago, Illinois: The Year-book Publishers, 1936.

As in former editions of this work, both diagnosis and treatment are adequately covered. The work contains 604 pages, somewhat larger than its predecessors and more profusely illustrated as well. Four hundred and seventy-seven papers making up the current literature on radiology in the various languages have been reviewed by the authors. The work can be recommended without reservation to everyone interested in the latest achievements in this department of medicine.

A TEXT-BOOK OF HISTOLOGY, ARRANGED UPON AN EMBRYOLOGICAL BASIS. By J. Lewis Bremer, M.D., Hersey Professor of Anatomy, Harvard University. 5th ed. of "Lewis and Stohr." 580 pp. 455 illus.; 36 in color. Philadelphia: P. Blakiston's Son & Co., 1936.

The present edition of this standard text maintains the superior character of former editions. Histological material is clearly presented and is given in adequate detail for both classroom work and ordinary reference. The subject-matter is treated, primarily, from the developmental standpoint, but this edition, more than its predecessors, gives numerous correlations of structure and function. Leads to further reading are likewise given in greater number. Interesting historical sidelights lend the work a character and readability that few histological texts possess.

A RADIOLOGICAL STUDY OF THE PARA-NASAL SINUSES AND MASTOIDS. By Amedee Granger, K.C.B., K.C.I., M.D., F.A.C.R., Professor of Radiology, Louisiana State University Medical Center; Director of the Department of Radiology, Louisiana State Charity Hospital, New Orleans. Gold Medal of the Radiological Society of North America in 1926, Gold Academic Palms of France in 1929. Illustrated with 113 engravings. Philadelphia: Lea & Febiger, 1936. Price, \$5.50.

The Granger method of examining the sinuses and mastoids has been employed by roentgenologists for over a decade. The Granger method of radiological examination is, therefore, well known to roentgenologists; probably to the nose and throat

specialists, not so well known. It is fully discussed and profusely illustrated in the present volume. An evening of the time of the roentgenologist or otolaryngologist cannot be better spent than with this radiological study of the paranasal sinuses and mastoids. The x-ray examinations of these cavities is probably the best single method that can be employed.

MEDICAL CLINICS OF NORTH AMERICA. Issued serially, one number every other month. Volume 20, Number 2. St. Louis Number, September, 1936. Octavo of 350 pages with 24 illustrations. Per Clinic year, July, 1936, to May, 1937. Paper, \$12.00; Cloth, \$16.00 net. Philadelphia and London: W. B. Saunders Company, 1936.

The contents consist of a symposium of endocrine disturbances by five well known clinicians, as well as the usual high class program of clinics all by St. Louis physicians and surgeons. This is the St. Louis number of the Medical Clinics of North America.

BRIGHT'S DISEASE AND ARTERIAL HYPERTENSION: By Willard J. Stone, B.Sc., M.D., F.A.C.P., Clinical Professor of Medicine, School of Medicine, University of Southern California, Los Angeles; Attending Physician to the Pasadena Hospital, Pasadena, Calif. 352 pages with 31 illustrations. Philadelphia and London. W. B. Saunders Company, 1936. Cloth, \$5.00 net.

This monograph on Bright's disease is the result of over twenty years' observation and care of patients. The author writes that in spite of the amount of attention given to Bright's disease, many aspects of the subject still remain as indefinite and inconclusive as in Bright's day. Among the subjects discussed are classification, the physiology and tests of kidney functions, water balance, edema, acidosis and alkalosis in Bright's disease, uremia, hemorrhage, Bright's disease, degenerative Bright's disease, the senile or atheromatous kidney. There is a very interesting chapter, Historical Sequences, which gives brief biographical sketches from William de Soliceto (1210) to A. R. Cushney (1917). The general practitioner and internist will find this study exhaustive and the work will be found of great value in a pathologic condition which has always presented a difficult problem in management.

DISEASES OF THE RESPIRATORY TRACT. Eighth Annual Graduate Fortnight of the New York Academy of Medicine. Contributors: J. Burns Amberson, Jr., M.D.; George Blumer, M.D.; Henry T. Chickering, M.D.; Lloyd F. Craver, M.D.; A. Raymond Dochez, M.D.; Leroy U. Gardner, M.D.; Yandell Henderson, Ph.D.; Charles J. Imperatori, M.D.; Chevalier L. Jackson, M.D.; Adrian V. S. Lambert, M.D.; Howard Lilienthal, M.D.; Harrison S. Martland, M.D.; Jonathan C. Meakins, M.D.; James Alexander Miller, M.D.; Eugene H. Pool, M.D.; Charles T. Porter, M.D.; Maximilian A. Ramirez, M.D.; Arnold Rice Rich, M.D.; David Riesman, M.D.; Charles Hendee Smith, M.D.; Harry Wessler, M.D. Illustrated. Philadelphia and London. W. B. Saunders Company, 1936.

As implied in the title, this book is a two weeks' postgraduate course in Diseases of the Respiratory Tract sponsored by the New York Academy of Medicine. Beginning with the common cold, the book contains discussions of sinus disease from infancy to old age, diseases of the larynx, trachea, and main bronchi, bronchiectasis, influenza of the respiratory tract, chronic pneumonitis, four chapters on pulmonary tuberculosis, abscess of the lung, malignancies and diseases of the mediastinum. The roster of contributors is evidence of the authoritative character of this work. Now that special efforts are being put forth in this state for early apprehension of tuberculosis, this book will prove a timely contribution to the subject.

COMPARATIVE ANATOMY. By Herbert V. Neal, Professor of Zoölogy, Tufts College, and Herbert W. Rand, Professor of Zoölogy, Harvard University. 739 pp. 540 illus. Philadelphia: P. Blakiston's Son & Co., 1936.

Comparative anatomy occupies a unique place in the college curriculum due to its importance as a background to preclinical medical classroom work. Consequently, in an attempt to meet this requirement, most textbook writers have typically presented a composite of vertebrate zoology, comparative anatomy, embryology and evolution rather than a thorough review of comparative anatomy alone. Though the present long-awaited text follows its predecessors in the material covered, it is more extensive and better illustrated than its forerunners. A brief review of the structural plan of invertebrate and vertebrate types together with a classification of animals is followed by an account of early vertebrate development and mammalian histology. Then the various animal systems are treated. Each chapter gives information on the comparative anatomy of an organ system, an account of this system as it appears in the human and a review of the salient developmental features. The material, though briefly treated in many cases, is given in a well rounded fashion. The last two chapters on the morphology of the head and on the ancestry of the vertebrates are well and critically handled. As the background to a premedical course, the work is excellent and should prove popular.

DR. COLWELL'S DAILY LOG FOR PHYSICIANS. A brief, simple, accurate financial record for the physician's desk, published by the Colwell Publishing Company, Not Inc., Champaign, Illinois.

This is one of the most satisfactory systems of bookkeeping for physicians existent today. A page to each day of the year takes care of thirty-six entries. The financial records are complete so that at the end of the year every detail for the computation of income tax is at hand. The book, 8½x10 inches, is convenient for filing and reference from year to year. Once inaugurated, in any physician's office, no further comment in the way of recommendation will be required.

AN INTRODUCTION TO MATERIA MEDICA AND PHARMACOLOGY. By Hugh Alister McGuigan, Ph.D., M.D., Professor of Materia Medica, Pharmacology and Therapeutics, University of Illinois College of Medicine, Chicago, and Edith P. Brodie, A.B., R.N., formerly Director School of Nursing, Vanderbilt University, Nashville, Tenn.; formerly Instructor in Materia Medica and Therapeutics, Washington University School of Nursing, St. Louis, Mo. With 71 text illustrations and 18 color plates. St. Louis: The C. V. Mosby Company, 1936.

Although it is not specifically so stated, this work is apparently written for students of nursing. The authors have arranged the subject matter in two parts. The first deals with the elementary phases of materia medica, giving the chemistry of drugs and the mathematics involved in their preparation. In part two, drugs are classified and discussed according to the system they affect. They are further classified according to their action on this system. Each drug is described, its action and uses are given, together with its dosage and method of administration.

From the standpoint of the general education of the student nurse in the science of medicine, she should be taught something of the nature of drugs, together with their action and uses. However, this work, like others, includes more information without which she could be a good nurse.

CLINICAL ROENTGEN PATHOLOGY OF THORACIC LESIONS. By William H. Meyer, M.D., Professor of Roentgenology in the New York Post-Graduate School of Columbia University, Director of Roentgenology in the New York Post-Graduate Hospital. Illustrated with 183 engravings. Philadelphia: Lea & Febiger, 1936. Price, \$6.00.

This is, as described in the title, a monograph on chest pathology as amenable to x-ray diagnosis. The work takes up the subject in the greatest detail. Not only have we a discussion of roentgenologic technic in its broadest sense, the author discusses the relative merits of fluoroscopy and radiography, which he says is tantamount to a discussion of the relative value of osculation and percussion. In other words, fluoroscopy and radiography supplement each other, and in the matter of arriving at a diagnosis both are necessary. As might be expected in such a work, extensive use is made of illustrations, both reproductions of x-ray films and diagrams in black and white. The book has a special appeal in Michigan, in view of the extraordinary emphasis placed on roentgenology in the apprehension of early cases of tuberculosis. This work is of particular value to the internist and perhaps equally valuable to the roentgenologist in checking over his mental equipment for the x-ray examination of the thoracic contents. There are numerous chapters in general works on roentgenology and in internal medicine dealing with chest roentgenology; naturally a monograph is fuller and more complete than a textbook chapter.

MICROBIOLOGY AND PATHOLOGY FOR NURSES. By Charles F. Carter, B.S., M.D., Director, Carter's Clinical Laboratory, Dallas, Texas; formerly Director of Laboratories, Parkland Hospital, Dallas, Texas, and Lecturer in Bacteriology and Pathology, Parkland Hospital School of Nursing. With 138 text illustrations and 14 color plates. St. Louis: The C. V. Mosby Company, 1936.

This is a work that has been designed by the author so as to present the fundamentals of microbiology in such a manner that the nurses will realize that microbes play an important part not only in disease, but also in the processes of nature in agriculture and in industry. No attempt has been made to give the detailed information necessary for one to work with bacteria, yet most phases of the subject are covered in a manner that is sufficiently complete for the purpose for which the book is written.

In the section on Pathology, the author again assumes that, while the nurse should have a knowledge of the fundamentals of disease, it is not necessary for her to acquire the detailed knowledge required of the medical student. He thus discusses each disease process, giving the essentials of its etiology and mode of spread, its symptoms and pathology. No attempt is made to outline treatment. In this the author is to be complimented. It is the opinion of the reviewer that this book could be read with profit by those not students of nursing or medicine.

A PRACTICAL MEDICAL DICTIONARY. By Thomas Lathrop Stedman, A.M., M.D., Editor of the "Twentieth Century Practice of Medicine," of the "Reference Handbook of the Medical Sciences," and of "The Nurse's Medical Lexicon," formerly editor of the "Medical Record." Thirteenth edition with the New British Anatomical Nomenclature. Illustrated. Baltimore: William Wood and Company, 1936. Price \$7.50.

The publication of the thirteenth edition of Stedman's Medical Dictionary marks the twenty-fifth anniversary of its first appearance. The frequent revision is evidence of effort of both author and the publisher to synchronize the work with the growth of medical words. The volume embodies all that may be expected of a dictionary regarding the latest editions of the U. S. Pharmacopœia and the National

Formulary. The author regrets the fact that Greek and Latin are no longer obligatory in the curricula of preparatory schools and colleges. As a result of lack of training in these languages many of the newer medical terms are open to certain reproach. However, Greek words from which the modern medical terms are derived are given in the Roman rather than the Greek letters. This is a concession to the user of the dictionary who may not be acquainted with the Greek alphabet. In the section on medical derivatives are given a goodly number of Greek and Latin prefixes and suffixes, all of them familiar to him who has not had more than two years of high school Greek. If those who have not availed themselves of the minimum Greek would endeavor to master these, it would result in more intelligent use of the medical dictionary. The vocabularies are printed in bold face type, making for easy reference. The definitions are simple and to the point. There are many illustrations, some in color. The work has a splendid start for a second quarter of a century of life. A triumph of the bookmaker's art in quality and the thumb-index. We bespeak for it a reception even greater than during the first twenty-five years.

New Medical Journal

Medical Classics is the title of a new magazine with the imprint of the Williams and Wilkins Company of Baltimore. Dr. E. C. Kelly of the Department of Surgery of Albany Medical College is the editor. The policy of medical classics is "to awaken the interest of all medical workers in the historical side of their profession. The work will be useful, not merely ornamental." Volume I, Number I, contains the life work of Sir James Paget. Following a picture of the subject is a chronology of Sir James' life. We would prefer that this had been embodied in a short descriptive biography rather than a mere chronology of dates. Then follows a bibliography of 175 items, evidence of the subject's industry and his prolificacy as a writer. And what is of immense interest are two papers printed in full, describing conditions with which Paget's name is associated, namely, on "A Form of Chronic Inflammation of Bones (Osteitis Deformans)," and on "Disease of the Mammary Areola Preceding Cancer of the Mammary Gland." Many will want to read these two interesting papers which have not been superseded at the present time. Subsequent numbers will deal in a similar way with other outstanding makers of medicine and surgery of the past. This is medical history but different; emphasis is placed upon the work and contribution which is given at length. *Medical Classics* will appear in monthly instalments for ten months a year. It is printed on first class quality paper of a size that will make a convenient volume when bound at the end of the year. This is a cultural contribution to medicine.

Brochure on Care of Diabetic Patients

Dr. William M. LeFevre of Muskegon is the author of what appears to us to be a very interesting and practical brochure of twenty pages, embodying instructions for the diabetic patient. As everyone knows, care of the diabetic patient involves a great deal of training of the patient if the best results, in fact, if any favorable results, are to be obtained.

This little brochure is a heart-to-heart talk with the diabetic in language that he will understand if he can read at all. His confidence once gained, the doctor proceeds to talk about foods almost in words of one syllable. After discussing the various food materials, the subject of treatment is taken up. The

matter of technic is dealt with in great detail, as well as such complications of diabetes as coma and insulin shock from an overdose of insulin. The idea of cleanliness not only of the body and feet, but the operation of self-administration of insulin as well as the care of this agent and the hypodermic syringe used to inject it are emphasized. Then there is the technic of measurement, how to use the scales and finally the examination of the urine. An important feature of this little work is the section on the approximate composition of foods with grouping of vegetables according to the percentage of carbohydrate. To the diabetic patient intelligent enough to realize the seriousness of his condition, this little work should prove of the utmost value.

Embryologic and Clinical Aspects Of Double Ureter

Allan B. Hawthorne, Montreal (*Journal A. M. A.*, Jan. 18, 1936), points out that complete duplication has been thought to be due to a very early splitting of the ureteral bud, the twin ureters being so closely placed that, by the expansion of the lower end of the wolffian duct, they would be drawn on to the bladder floor as separate openings. Chwalla, on the other hand, has shown that they are most probably due to the formation of twin ureteral buds, arising one above the other on the lower end of the wolffian duct. Over a period of seventeen years in the Royal Vicorial Hospital sixty-three duplications of the pelvis and ureter have been diagnosed. Of this number twenty-three were complete and three of these bilateral. The remaining forty were incomplete or branched in type, two of these being bilateral. Only eleven were discovered accidentally and were free from other disease. The remaining fifty-two were involved in an associated renal lesion. The lesions most frequently found were hydronephrosis or hydro-ureter, and infection, either alone or in combination. Any symptom present in the condition of double ureter is due to an associated lesion. Therefore, the original finding of this condition was from autopsy material or at the operating table. With the invention of the cystoscope, complete duplications were found by the presence of additional ureteral orifices in the bladder. In the condition of an ectopic supernumerary ureter, the diagnosis at least in the female is often suggested from the history. In these cases, with an ectopic ureter opening into the urethra vestibule or vagina, the history of incontinence from birth accompanying an otherwise normal urination should provoke an earnest search for an additional orifice in one of these locations. Excretion pyelography may or may not be of use in these cases as the upper or diseased segment may not excrete sufficient of the iodine solution to cast a shadow. Similarly intravenous indigo carmine can be used in an attempt to find an additional orifice. This may fail, owing to the same lack of secretion and also because the supernumerary ureter is frequently obstructed with a marked slowing in the rate of excretion. In the male an ectopic ureteral opening is more difficult to diagnose and then only when the symptoms of infection, hydronephrosis, hematuria or calculus cannot be satisfactorily explained following the usual routine examination. Here with careful search of the posterior urethra, coupled with the use of indigo carmine intravenously, the ectopic ureteral orifice may be found. Excretion pyelography may show the additional superior pelvis. At times the diagnosis may be suggested by the small pelvis found in the lower pole of the kidney shadow, even before the ectopic ureter is searched for. The anatomic variations of the anomaly are many.

From a pathologic point of view, any lesion that may be found in a normally developed kidney can, of course, be found in an anomalous double kidney. In fifty-two of the sixty-three double ureters, some pathologic lesion was present. The two predominating lesions were obstruction, with resultant hydro-ureter and hydronephrosis, and infection. Evidence of hydronephrosis was present in forty-eight of these pelves and ureters, and fifty of the fifty-two showed evidences of infection. In the majority of cases the lesion was one of infected hydronephrosis. Of the fifty-two cases only thirteen were treated by operative measures, and these all belonged to the group of incomplete bifurcations. The treatment as far as the double ureter is concerned is really the treatment of the accompanying surgical lesion, for the ectopic supernumerary ureter, complete or partial ureterectomy with nephrectomy or heminephrectomy as the conditions indicate.

Permanence of Cure Following Ruptured Duodenal Ulcer

Donald Guthrie, Sayre, Pa., and Robert F. Sharer, Chicago (*Journal A. M. A.*, Sept. 26, 1936), state that acute perforated duodenal ulcer is of rare occurrence. The importance of a correct diagnosis and immediate surgical management are stressed, because in no other acute abdominal emergency is the time factor of greater importance. Postmortem examination, which was carried out in every operative case that ended in death, gave no indication that primary gastro-enterostomy or a partial gastrectomy would have made a reduction in the operative mortality. Drainage of the abdomen increases the hazard of bowel obstruction and may well be omitted in the majority of cases less than eight hours old. In this group of patients with simple closure who did not develop obstruction, over 95 per cent of those followed remained well, the perforation perhaps destroying the ulcer site to a degree approaching that of the cauterization. Delayed gastro-enterostomy may be safely performed on those developing obstruction, the great majority remaining symptom-free. From a review of the complete autopsies and a nearly complete follow up in this long term series of cases, it would appear that simple closure should be the procedure of choice in the majority of perforated duodenal ulcers.

Duration of Fractures and Operative Defects Of Skull as Revealed by Roentgenograms

In order to obtain some idea of the reaction of the skull to traumatic and surgical defects, Mark Albert Glaser and Edward S. Blaine, Los Angeles (*Journal A. M. A.*, July 4, 1936), studied 100 cases by repeated roentgen examination over a period of from one to ten years. Linear fractures in children less than 6 years of age disappear within from six to twelve months after injury. In the minority of cases, linear fracture in adults begins to fade from six to nine months after injury and disappears in from twelve to eighteen months. The majority, however, show fading from eighteen to twenty-four months after injury and entirely disappear in from four to five years, rarely longer. In depressed fractures without elevation, the fragments become rounded and unite, and the lines of fracture cannot be detected, though the depression is apparent. In operative defects wherein the bone has been removed, or in cases of depressed fracture wherein the fragments have been removed, the cranial defect never becomes smaller, the only change being a rounding of the edges. Bone flaps may either undergo absorption or appear normal. Bone grafts properly placed form a definite covering over the defect.

INDEX TO VOLUME 35

AUTHOR'S INDEX

Allen, Raymond B.....	433
Altshuler, Samuel S.....	645
Aronstam, Noah E.....	315
Ascher, M. S.....	369
August, Ralph V.....	657
Barbour, Herbert V.....	116, 405
Benning, C. H.....	79
Berris, J. M.....	708
Bertucci, Joseph P.....	506
Bloom, Arthur R.....	512
Boys, Floyd.....	10
Brachman, D. S.....	709
Brines, Osborne A.....	457
Bristow, J. H.....	175
Brown, I. W.....	707
Bruce, James D.....	499
Carr, Earl Ingram.....	17
Coller, Frederick A.....	10
Cook, Henry.....	160
Counseller, Virgil S.....	551
Crile, George W.....	694
Cumming, Robert E.....	638
Cummings, Howard H.....	309
Currier, Fred P.....	25
Davis, C. R.....	438, 504
Davis, David B.....	25
Davis, James E.....	311
De Jong, Russell N.....	652
Dempster, Wilfrid T.....	791
Dowling, Harvey E.....	164
Eley, R. Cannon.....	769
Fitzgerald, Neal.....	266
Furlong, Harold A.....	244
Giese, F. W.....	369
Grant, L. E.....	708
Gudakunst, Don W.....	641
Haber, William.....	53
Hamlin, L. E.....	502
Hartwell, Shattuck W.....	700
Heyd, Charles Gordon.....	689
Hull, L. W.....	175
Jacoby, Myron D.....	496
Joyce, Stanley J.....	447
Kamperman, George.....	28
Keitzer, Walter A.....	168
Kimball, O. P.....	641
Kreutz, George C.....	521
Krieg, Earl G.....	178
Kupka, Edward.....	702
La Ferté, A. D.....	366, 782
Larsson, B. H.....	86
Lashmet, F. H.....	779
Le Fevre, William.....	94
Lippmann, Walter.....	526
Long, Edgar C.....	222
Mack, Harold C.....	374, 775
Maddock, Walter G.....	237
Malloch, Archibald.....	785
Maloney, F. G. H.....	90
Mayer, Leo L.....	81
Mayer, Willard D.....	219
Meade, W. H.....	233
Mellen, Hyman S.....	245
Meyers, Maurice P.....	385
Miller, Norman F.....	75
Musser, J. H.....	1
Myers, Gordon B.....	249, 457
Newman, M. K.....	708
Orecklin, Leo.....	659
Peckham, C. H.....	301
Penberthy, Grover C.....	293, 627
Perry, H. E.....	697
Pierson, Merle.....	699

Polozker, Isaac L.....	245
Purdy, Clayton C.....	55
Rector, Frank Leslie.....	37, 99, 181, 254, 328, 391, 461
Robb, J. M.....	567, 772
Rosenzweig, Saul.....	385
Saltzstein, Harry C.....	385
Sanders, Alexander W.....	326
Schaefer, Robert L.....	516
Schreiber, Frederic.....	557
Schutz, Helene Emeth.....	97
Scott, Robert D.....	242
Siddall, R. S.....	561
Skolnick, Max H.....	455
Spencer, James A.....	440
Stapleton, William J., Jr.....	170
Strickroot, Fred L.....	516
Teed, E. Wallace.....	445
Thompson, Gershon J.....	320
Tuck, R. G.....	179
Van der Velde, Otto.....	317
Vreeland, C. Emerson.....	226, 632
Waggoner, R. W.....	155, 652
Waldbott, G. L.....	369
Walters, Waltman.....	491
Weiser, Frank A.....	323
Wieder, Lester M.....	359
Woodburne, A. R.....	387

CONTRIBUTED PAPERS

A

Abortion, The treatment of. C. R. Davis, M.D., A.B., F.A.C.S., 438
Abscess, Subpectoral. Robert D. Scott, M.D., 242
Achlorhydria: its clinical significance and management. C. Emerson Vreeland, M.D., 226
Adrenal, Blastoma of the. William Le Fevre, A.B., M.D., F.A.C.P., 94
Adrenal cortical insufficiency. Robert L. Schaefer, M.D., and Fred L. Strickroot, M.D., 516
Allergic patients, The results of tonsillectomy in. G. L. Waldbott, M.D., M. S. Ascher, M.D., and F. W. Giese, M.D., 369
Allergic shock. Merle Pierson, M.D., 699
Aneurysms, Intracranial. Fred P. Currier, M.D., and David B. Davis, M.D., 25
Aphasia, Nominal or amnesic, with report of a case. Hyman S. Mellen, M.D., and Isaac L. Polozker, M.D., 245
Appendicitis, The relative value of the symptoms of. C. R. Davis, A.B., M.D., F.A.C.S., 504
Arteries, peripheral, Diseases of. Walter G. Maddock, M.D., 237
Asphyxia as a factor in paresis. Max H. Skolnick, A.B., M.D., 455

B

Basic sciences, Some contributions to the, made in Michigan. Grover C. Penberthy, M.D., 627
Birth control movement, The. George Kamperman, M.D., 28
Blastoma of the adrenal. William Le Fevre, A.B., M.D., F.A.C.P., 94
Botryomycosis, Human, with case report. Noah E. Aronstam, M.D., 315
Brain tumors, The diagnosis of. R. W. Waggoner, M.D., 155
Bronchiogenic carcinoma with clinical and pathologic discussion. Osborne A. Brines, M.D., and Gordon B. Myers, M.D., 457

INDEX

C

- Cancer control, Achievements in. Earl Ingram Carr, M.D., 17
 Cancer, Prevention of. F. G. H. Maloney, M.B. (Tor.), F.A.C.S., 90
 Cancer survey in Michigan. Frank Leslie Rector, M.D., 37, 99, 181, 254, 328, 391, 461
 Carcinoma, Bronchiogenic, with clinical and pathological discussion. Osborne A. Brines, M.D., and Gordon B. Meyers, M.D., 457
 Cervix, Common lesions of the. Norman F. Miller, M.D., 75
 Childhood, Surgery of. Grover C. Penberthy, M.D., 293
 Clinico-pathologic conference at Detroit Receiving Hospital. Osborne A. Brines, M.D., and Gordon B. Myers, M.D., 457
 Cornification of the glans penis. Otto Van der Velde, 317
 Coronary disease, The gastro-intestinal syndrome in. Joseph P. Bertucci, M.D., 506

D

- Deafness from parotitis, Total and permanent. J. H. Bristow, M.D., 175
 Dermatology, Physical therapy in. Leo Orecklin, M.D., 659
 Dermatoses, Common fungous: their diagnosis and management. Lester M. Wieder, 359
 Diabetes, a simple plan for the treatment of, in general practice. F. H. Lashmet, M.D., F.A.-C.P., 779
 Diet therapy, Principles of. Samuel S. Altshuler, M.D., F.A.C.P., 645
 Don't detour. J. M. Robb, M.D., 567

E

- Edema, subcutaneous, The pathogenesis and treatment of. Gordon B. Myers, M.D., 249
 Education, medical, Problems and trends in. Raymond B. Allen, M.D., 433
 Encephalograms, The interpretation of. Russell N. De Jong, M.D., and Raymond W. Waggoner, M.D., 652
 Endocarditis, subacute bacterial, Pericarditis complicating. Willard D. Mayer, M.D., 219
 Epilepsy in Detroit, A study of. O. P. Kimball, A.M., M.D., and Don W. Gudakunst, M.D., 641
 Essential Hypertension, Comparative anatomy and pathologic physiology of the adrenal-sympathetic complex with relation to the genesis and surgical treatment of. George W. Crile, M.D., 694
 Ethmoidectomy, Subtubinal, in the treatment of uveitis. J. M. Robb, M.D., 772

F

- Fractures of the spine. A. D. La Ferté, M.D., 366

G

- Gall bladder, Comments on the medical management of disease of the. J. H. Musser, M.D., 1
 Gall bladder disease, The development of the x-ray diagnosis of. Arthur R. Bloom, M.D., 512
 Gall bladder, Some surgical aspects of disease of the. Frederick A. Collier, M.D., and Floyd Boys, M.D., 10
 Gastric and duodenal ulcer, Operative treatment of: Physiologic and pathologic principles influencing the type of procedure. Waltman Walters, M.D., 491
 Gastro-intestinal syndrome in coronary disease, The. Joseph P. Bertucci, M.D., 506
 Glans penis, Cornification of the. Otto Van der Velde, M.D., 317

- Good medical service, Do the people of Michigan want a guarantee of. Howard H. Cummings, M.D., 309
 Government philosophy in a sick world. Walter Lippmann, 526
 Gynecologic surgery, Practical considerations in. Virgil S. Counseller, M.D., 551

H

- Historic markers. William J. Stapleton, Jr., M.D., 170
 Historic sidelights on medical terminology. Harold C. Mack, B.S., M.D., F.A.C.S., 374
 Hypertension: Etiology and effects. Frank A. Weiser, M.D., 323
 Hypertrophic stenosis of pylorus in an adult. Earl G. Krieg, M.D., 178
 Hypothyroidism. Non-myxedematous. Helene Emeth Schutz, M.D., 97

I

- Inadequate poor laws. R. G. Tuck, M.D., 179
 Infantile paralysis, Treatment of. A. D. La Ferté, M.D., 782
 Intracranial aneurysms. Fred P. Currier, M.D., and David B. Davis, M.D., 25
 Intra-ocular foreign body problem, The. George C. Kreutz, M.D., 521
 Ionization for nasal allergy. Stanley J. Joyce, M.D., 447

K

- Kidney, Diseases of the: Differential diagnosis. Robert E. Cumming, M.D., 638

L

- Learning, Teaching and. James E. Davis, M.D., 311
 Library, medical, Why a? Archibald Malloch, M.D. (McGill), F.R.C.P. (Lond.), 785

M

- Maternal Health League, What the public expects from the. Harold A. Furlong, M.D., F.A.C.S., 244
 Measles, Placental extract (immune globulin-human) with special reference to its use in the prevention and modification of. R. Cannon Eley, M.D., 769
 Medical education, Problems and trends in. Raymond B. Allen, M.D., 433
 Medical libraries, Wilfrid T. Dempster, Sc.D., 791
 Medical practice in Sweden. B. H. Larsson, M.D., 86
 Medical relief program in Michigan. William Haber, 53
 Meningiomas of the posterior fossa. Frederic Schreiber, M.D., 557
 Michigan State Medical Society—a review. Henry Cook, M.D., 160
 Mouth, Some lesions of the, due to the streptococcus and staphylococcus. A. R. Woodburne, M.D., 387

N

- Nasal allergy, Ionization for. Stanley J. Joyce, M.D., 447

O

- Obstetrics and gynecology, Currents and counter-currents in. Harold C. Mack, M.D., F.A.C.S., 775
 Ophthalmia, gonorrheal, Artificial fever therapy of. J. M. Berris, M.D., M. K. Newman, M.D., and L. E. Grant, M.D., 708

INDEX

Ophthalmology, Meanderings in. Leo L. Mayer, M.D., 81
 Organized medicine. H. E. Perry, M.D., 697
 Organized medicine, Society and. Charles Gordon Heyd, B.A., M.D., F.A.C.S., 689
 Ovarian tumor, Unusual. L. E. Hamlin, M.D., F.A.C.S., 502

P

Pancreatitis, A presentation of cases of. Edgar C. Long, M.D., M.S., 222
 Paresis, Asphyxia as a factor in. Max H. Skolnick, A.B., M.D., 455
 Parotitis, Total and permanent deafness from. J. H. Bristow, M.D., 175
 Pavaex therapy, The value of. Harry C. Saltzstein, M.D., Maurice P. Meyers, M.D., and Saul Rosenzweig, M.D., 385
 Pellagra. I. W. Brown, A.B., M.D., 707
 Pericarditis complicating subacute bacterial endocarditis. Willard D. Mayer, M.D., 219
 Placental extract (immune globulin-human) with special reference to its use in the prevention and modification of measles. R. Cannon Eley, M.D., 769
 Poor laws, inadequate. R. G. Tuck, M.D., 179
 Pregnancy late, The incidence, differential diagnosis, and immediate and remote prognosis of the toxemias of. C. H. Peckham, M.D., 301
 Prostate gland, Diseases of the. Gershom J. Thompson, M.D., 320
 "Pus tubes" discovered after opening the abdomen: The problem, some statistics. Shattuck W. Hartwell, M.D., 700

S

Sanitary control of diseases where alcoholic beverages are sold. C. H. Benning, M.D., 79
 Scrotum, The injection treatment of cystic enlargements of the: hydrocele and spermatocele. Walter A. Keitzer, M.D., 168
 Society and organized medicine. Charles Gordon Heyd, B.A., M.D., F.A.C.S., 689
 Spine, Fractures of the. A. D. La Ferté, M.D., 366
 Stenosis, Hypertrophic, of pylorus in an adult. Earl G. Krieg, M.D., 178
 Subpectoral abscess. Robert D. Scott, M.D., 242
 Suction apparatus, A. Ralph V. August, M.D., 657
 Surgery of childhood. Grover C. Penberthy, M.D., 293
 Sweden, Medical practice in. B. H. Larsson, M.D., 86

T

Teaching and learning. James E. Davis, M.D., 311
 Tenosynovitis. James A. Spencer, M.D., 440
 Terminology, medical, Historic sidelights on. Harold C. Mack, B.S., M.D., F.A.C.S., 374
 Tetany of the newborn. Myron D. Jacoby, M.D., 496
 Tonsillectomy. E. Wallace Teed, M.D., 445
 Tonsillectomy, The results of, in allergic patients. G. L. Waldbott, M.D., M. S. Ascher, M.D., and F. W. Giese, M.D., 369
 Toxemias of late pregnancy, The incidence, differential diagnosis, and immediate and remote prognosis of the. C. H. Peckham, 301
 Tuberculosis in the elderly. W. H. Meade, M.D., 233
 Tuberculosis of the uterus and adnexa, Clinic on. R. S. Siddall, M.D., 561
 Tuberculosis sanatorium, When shall a patient be discharged from a? Some criteria. Edward Kupka, M.D., 702

U

Ulcer, gastric and duodenal, Operative treatment of: Physiologic and pathologic principles influencing the type of procedure. Waltman Walters, M.D., 491
 Undulant fever. C. Emerson Vreeland, M.D., 632
 University and the state, The. James D. Bruce, M.D., 499
 Upper urological tract obstruction and hypertension. L. W. Hull, M.D., 175
 Uterus and adnexa, Clinic on tuberculosis of the. R. S. Siddall, M.D., 561
 Uterus didelphys. Alexander W. Sanders, M.D., 326
 Uveitis, Subturbinal ethmoidectomy in the treatment of. J. M. Robb, M.D., 772

V

Visual findings, An analysis of, in subnormal individuals. Harvey E. Dowling, M.D., 164
 Von Pirquet test technique. D. S. Brachman, M.D., D.P.H., 709

DEPARTMENT INDEX

Be Prepared for Your Cancer Patient

Cancer of the breast, 48
 Cancer of the mouth, 193
 Cancer of the uterus, 264
 Carcinoma of the gastro-intestinal tract, 110
 Future progress in cancer, 338

Business Side of Medicine

Good office records make money, 805

Communications

Amberg, Emil, 211
 Bartholomew, H. S., 681
 Collier, Frederick A., 212
 Crowley, David H., 818
 Frank, L. L., 212
 Gorsline, C. S., 70, 483
 Hawkey, J. W., 818
 McIntyre, J. E., 819
 Thuner, Alois, 818
 Warnshuis, F. C., 283

County Societies

Bay County, 62, 206
 Berrien County, 62
 Calhoun County, 62, 345, 479, 718, 813
 Dickinson-Iron County, 345
 Eaton County, 139, 207, 345, 421, 479, 541, 678, 813
 Genesee County, 421, 480, 814
 Grand Traverse-Leelanau-Benzie County, 62, 346
 Houghton-Keweenaw-Baraga County, 678
 Huron-Sanilac County, 62, 279
 Ingham County, 279, 814
 Ionia-Montcalm County, 480
 Jackson County, 62, 422, 541
 Kalamazoo Academy of Medicine, 63
 Lapeer County, 63
 Luce County, 63
 Manistee County, 346, 541, 719
 Mecosta County, 207
 Mecosta-Osceola County, 207
 Midland County, 139
 Monroe County, 140
 Muskegon County, 63, 140, 207
 Northern Michigan Society, 63, 141, 279, 422, 719, 814
 Oakland County, 63, 347, 423
 O. M. C. O. R. O. County, 63

Ottawa County, 480
 Saginaw County, 542
 St. Clair County, 64, 141, 207, 347, 423
 Van Buren County, 207
 Washtenaw County, 64, 141, 208, 279, 347, 423, 481, 815
 Wayne County, 424, 719
 Wexford Society, 64

The Doctor's Library

- American Can Company: Facts about commercially canned foods, 548
 Bailey, Hamilton: Recent advances in genito-urinary surgery, 726
 Balme, Harold: The relief of pain, 827
 Beck, Alfred C.: Obstetrical practice, 74
 Berens, Conrad, et al: The eye and its diseases, 688
 Bram, Israel: Exophthalmic goiter and its medical treatment, 547
 Bremer, J. Lewis: A textbook of histology, arranged upon an embryological basis, 827
 Brown, Percy: American martyrs to science through the roentgen rays, 488
 Carrell, Alexis: Man, the unknown, 488
 Carter, Charles F.: Microbiology and pathology for nurses, 829
 Christian, Henry Asbury: Medical papers, 357
 Christopher, Frederick (editor): Textbook of surgery (by American authors), 356
 Colwell's—Daily log for physicians, 828
 Davis, John Eisele: Principles and practice of recreational therapy for the mentally ill, 726
 Dick, George F., et al: The 1935 year book of general medicine, 218
 Dodge, Carroll William: Medical mycology: fungous diseases of men and other mammals, 356
 Dutton, W. F.: Parenteral therapy, 432
 East, Terence: Recent advances in cardiology, 292
 Ennis, Leroy M.: Dental roentgenology, 356
 Eusterman, George B., and Balfour, Donald C.: The stomach and duodenum, 154
 French, Herbert, editor: An index of differential diagnosis of main symptoms, 356
 General X-ray Corporation: X-ray studies in advanced radiographic technic, 74
 Goldsmith, W. Noel: Recent advances in dermatology, 357
 Graham, Evarts A.: The 1935 year book of general surgery, 218
 Granger, Amédée: A radiological study of the para-nasal sinuses and mastoids, 827
 Haggard, William D.: Surgery—queen of the arts, 154
 Hansel, French K.: Allergy of the nose and paranasal sinuses, a monograph on the subject as related to otolaryngology, 726
 Harrison, Bede J. Michael: A textbook of roentgenology, the roentgen ray in diagnosis and treatment, 292
 Hayner, J. C.: Regional anatomy adapted to dissection, 154
 Henry, George W.: Essentials of psychopathology, 74
 Herrmann, George R.: Synopsis of diseases of the heart and arteries, 548
 Hertzler, Arthur E.: Diseases of the thyroid gland, 74
 Howell, William H.: A textbook of physiology for medical students and physicians, 827
 Hutchison, Robert, and Wauchope, G. M.: For and against doctors, 153
 Jackson, Chevalier: Diseases of the air and food passages of foreign-body origin, 727
 Jacoby, George W.: Physician, pastor and patient, 826
 Knowles, Frank Crozer: Diseases of the skin, 217
 Krafka, Joseph, Jr.: A textbook of histology, 688
 Lautman, Maurice F.: Arthritis and rheumatic disease, 726
 Livingstone, James L.: Aids to medicine, 153
 McGuigan, Hugh Alister: An introduction to materia medica and pharmacology, 828
 MacCallum, W. G.: A textbook of pathology, 727
 Mathews, Albert P.: Principles of biochemistry, 727
 Mayo Clinic: Collected papers of the Mayo Clinic and Mayo Foundation, 488
 Medical clinics of North America, Vol. 20, No. 2, 828
 Mekie, Eric C.: Handbook of surgery, 488
 Meyer, William H.: Clinical roentgen pathology of thoracic lesions, 829
 Montague, J. F.: Why bring that up; A guide to and from seasickness, 826
 Morton, Dudley J.: The human foot, its evolution, physiology and functional disorders, 727
 Neal, Herbert V.: Comparative anatomy, 828
 Newcomer, Marian Staats: Bewildered patient, 355
 Newton, W. H.: Evan's recent advances in physiology, 488
 N. Y. Academy of Medicine: Diseases of the respiratory tract, 488, 828
 Parsons, T. R.: Fundamentals of biochemistry in relation to human physiology, 154
 Pearlman, Louis: Bad breath, 74
 Prinly, A., and Wyard, Stanley: Clinical atlas of blood diseases, 153
 Rogers, Gladys Gage: New Pathways for children with cerebral palsy, 74
 Schumann, Edward A.: A textbook of obstetrics, 827
 Stedman, Thomas Lathrop: A practical medical dictionary, 829
 Stimson, Philip Moen: A manual of the common contagious diseases, 217
 Stone, Willard J.: Bright's disease and arterial hypertension, 828
 Stratford, Esme Wingfield: New minds for old, 217
 Taussig, Fredrick J.: Abortion: Spontaneous and induced, medical and social aspects, 355
 Thoma, Kurt H., et al: Oral diagnosis and treatment planning, 827
 Underhill, Frank P.: Toxicology, or the effect of poisons, 826
 U. S. Public Health Service: Venereal disease information, 218
 Whitnall, S. E.: The study of anatomy. Written for the medical student, 688
 Wolf, William: Endocrinology in modern practice, 688
 Year book of neurology, psychiatry and endocrinology (1935), 292
 Year book of radiology (1936), 827
 Zahorsky, John: Pediatric nursing, 726

Editorial Department

- 1936, 44
 American Board of Radiology, The, 45
 An important health measure, 662
 Annual meeting, The, 664
 Appendicitis, 402
 Automobile accidents, 260, 468
 Barrett, Albert Moore, 336
 Basic science bill, The, 801
 Basic sciences, The, 401
 Become acquainted with your legislator, 466
 Books, 802
 Business of the Michigan State Medical Society, The, 713
 College of Physicians, The, 258
 Corporations must not practice medicine, 334

Correspondence, 466
 Dirty dishes, 108
 Does the doctor shift his economic burden? 525
 Examination for insurance, 466
 Foster, Dr. L. Fernald, 667
 Fractures, 189, 800
 Health of the nation, 191
 Hobbies, 566
 Holmes, Dr. Arthur D., 190
 Jennings, Charles Godwin, 107
 Journal of the A. M. A., The, 337
 Keep all medical operations within the profession, 334

King George V, 109
 Life expectancy, 402
 Medical case histories, 335
 Medical museums, 190
 Medicine: What does it mean? 801
 Michigan, a healthful state, 525
 Michigan finances, 468
 Moll, Dr. Carl Frederick, 403
 More than science required, 565
 Necessities and luxuries, 108
 Persons who do not seek medical care, 189
 Pharmacopoeia for today's needs, A, 188
 Physicians of character, 467
 Popular profession, A, 260
 Preventive medicine, 190
 Prize winners, 260
 Progress in tuberculosis, 712
 Propaganda, 566
 Socialism and medicine, 44
 "Socialized" law, 109
 Social security and medicine, 803
 Some sacrifice, 191
 State medicine cuts number of physicians, 259
 Suggestion, A, 258
 Suggestion for foundations, A, 335
 Taking stock, 467
 Taking the laity into our confidence, 45
 Taking the "x" out of x-ray, 802
 Taxation, 663
 Teachers and doctors, 107
 To the legislator, 711
 Tuberculosis early diagnosis, 336
 What are your difficulties? 259
 What competition leads to, 713
 Who wants socialized or state medicine! 565

The Editor's Easy Chair

Beware the Greeks bearing gifts, 529
 Medical guild, The, 47
 Our neighbors, 262

Medico-Legal Department

Effect of patient's negligence. Neal Fitzgerald, 266
 Get complete consent in writing before you operate. Herbert V. Barbour, 572
 Interesting cases briefed. Clayton C. Purdy, 55
 May doctors be compelled to testify in court without prearranged fee? Herbert V. Barbour, 116
 Narcotic drug prescriptions. Herbert V. Barbour, 405
 Who may be called "Doctor," 406

Michigan's Department of Health

Michigan's Department of Health, 68, 143, 210, 284, 349, 425, 482, 543, 620, 680, 720, 819

A Moment of Medical History

Hypodermic syringe, The, 568
 Intravenous injection, 667
 Preventive inoculation, 50
 Transfusion, 112

News and Announcements

News and announcements, 70, 146, 212, 286, 350, 427, 484, 545, 623, 682, 722, 821

Obituary

Babcock, B. W., 145
 Baker, George J., 70
 Barrett, A. M., 283
 Bogan, James H., 211
 Cameron, Duncan A., 681
 Chauncey, Edwin M., 283
 Donovan, Daniel O., 547
 East, Omar J., 349
 Garber, Frank Webster, 818
 Holmes, Arthur D., 211
 Jennings, Charles Godwin, 145
 Kelly, H. E., 211
 Kerr, Murdock M., 721
 Kuhn, Charles F., 69
 Loree, Ira Dean, 681
 McGillicuddy, James E., 69
 Mills, E. P., 547
 Moll, Carl F., 349
 O'Hara, Bernard A., 818
 Parker, Hal M., 145
 Stewart, Peter, 145
 Torres, Lois, 681
 Upjohn, James T., 145
 Williams, Alden H., 483
 Zumstein, Frederick E., 818

President's Page

Design for general practitioner, 799
 Enrich yourselves, 465
 Eternal vigilance and liberty, 106
 Farewell, 564
 Know the truth—spread your knowledge, 43
 Let your light so shine, 333
 Medical societies, 524
 More information to the people, 187
 Recruiting season, 400

Society Activity

Advisory Committee to the Woman's Auxiliary, Report of, 613
 "Afflicted Children" and "Filter Boards," 56
 Afflicted-crippled child conference, 472
 Analysis of county medical costs, 410
 Analysis of expenditures for 1935, 271
 April first (annual dues), 270
 Better obstetrics in Michigan, 807
 Cancer committee, Minutes of meeting of, 276
 Report, 604
 Children's fund opens clinic at Traverse City, 471
 Collection agencies, 57
 Committee decisions, 136, 203, 275, 412
 Council and committee meetings, 58, 136, 203, 275, 341, 412, 533, 673, 715, 808
 Council chairman's communication, 134, 200, 340, 409, 470, 532, 673, 715, 806
 Council of the Michigan State Medical Society: Annual meeting, minutes, 716
 Mid-Winter meetings, proceedings, 118
 County health units, 340
 County secretaries, Attention! 57
 County secretaries' conference, 807
 Economics, Committee on, Minutes of meeting, 60, Report, 600
 Executive Committee of the Council, Minutes of meeting, 58, 276, 415, 472, 537, 715, 809
 Executive Committee of the Council and the Legislative Committee, Minutes of joint meeting of, 675

INDEX

- Executive Committee of the Council, with Public Relations Committee, and the Special Contract Committee to Governmental Agencies, Minutes of meeting of, 341
- Filter system, 202
- Governor Fitzgerald hears medical viewpoint on crippled-afflicted child problem. 268
- House of Delegates, Michigan State Medical Society (1936), 413, 478
 - Summary of proceedings, 615
- Income tax for physicians, 136
- Insurance examination fees, Report of special committee on, 611
- "Integration program" of the Michigan State Medical Society, 201
- Invitational golf, 622, Report of scores, 816
- Legislative Committee, Minutes of meeting, 61, 139, 204, 277, 417, 474, 537, 812
 - Report, 598
- Legislative Committee, Minutes of joint meeting with the Legislative Committee of the Michigan Hospital Association, 811
- Liaison Committee with Hospital association, Minutes of meeting of, 674
 - Report, 612
- Liaison Committee with the State Bar of Michigan, Report of, 612
- Local Committees on arrangements (1936), 479
- Look to your county medical society, 139
- Maternal and child health, 340
- Maternal Health Committee, Minutes of meeting, 137, 534,
 - Report, 607
- Medical Economics Committee, Minutes of meeting of, 343, 474
- Mental hygiene, 411
- Mental Hygiene Committee, Minutes of meeting, 418
 - Report, 611
- Michigan State Medical Society, Seventy-first annual Meeting, 471, 574
 - House of Delegates (1936), 413, 478, 615
 - Proceedings, 729
 - Program, 577
- Par: 54, 806
- Postgraduate education, 134
- Postgraduate Education, Advisory Committee, Minutes of meeting, 414
 - Report, 605
- Postgraduate Study—University of Michigan Medical School and Michigan State Medical Society, Program, 133
- Preventive Medicine Committee, Minutes of meeting of, 61, 476, 812
 - Report, 604
- Public Health Education, Minutes of the meeting of, Joint Committee on, 536
 - Report, 599
- Public health education integrated through the Public Relations Committee, 807
- Public Relations Committee, Minutes of meeting, 137, 205, 277, 343, 476, 674
 - Report, 607
- Public Relations Committee with the Filter Board of Wayne County and the Probate Judge, Minutes of meeting of, 419
- Public Relations Committee and Legislative Committee, Minutes of joint meeting of, 677
- Public Relations Committee and Preventive Medicine Committee, Minutes of joint meeting of, 477
- Radio Committee, Minutes of meeting of, 535
 - Report, 613
- Real honor roll, A, 532
- Relief medicine, 270
- Résumé of Social Security Act, Wm. J. Burns, 57
- Schedules A-B-C-D, 135
- Scientific exhibit, 200
- Secretaries' conference, Annual, 195
- Secretaries' conference round table:
 - ERA medical care in Monroe County, 197
 - SERA medical care in Oakland County, 198
 - Hospitalization of indigents in Bay County, 198
 - Ingham County plan for hospitalization of indigents, 199
 - Battle Creek Academy of Medicine and Dentistry, Inc., 200
- Section officers, Minutes of meeting (January 14, 1936), 203
- Social security in Michigan, 269
- Social service, please note, 134
- Special Committee to Survey the Medico-Legal Defense Fund, Report of, 614
- Special Contact Committee to Governmental Agencies and Allied Groups, Minutes of meeting (January 8, 1936), 138
 - Report, 610
- They are doing your job! 533
- Two important medical golf tournaments, 270
- Way of one foundation, The, 269
- WPA medical care, 57

Woman's Auxiliary

- Woman's Auxiliary, 65, 142, 208, 281, 348, 424, 481, 542, 617, 679, 815

51740

Michigan state medical society.
Journal.
v.35, 1936

DATE

ISSUED TO

51740

Michigan state medical society. Journal.
v.35, 1936

RETURN THIS BOOK ON OR BEFORE LAST DATE STAMPED

--	--	--	--

